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A CATALOGUE

OF

THE MAGNITUDES OF 1081 STARS

LYING BETWEEN −30° DECL. AND THE SOUTH POLE,

FROM OBSERVATIONS MADE IN THE YEARS 1885–6

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BY

A. STANLEY WILLIAMS.

LONDON:
TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.
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INTRODUCTION.

The observations on which the present Catalogue is based were made in the course of a voyage to Australia, round the Cape of Good Hope, and back by the Red Sea, including a stay of two months in Australia. The following is an account of the manner in which the observations were made.

Before leaving England seven groups of comparison stars were selected from "Harvard Photometry," and several hundred observations of the brightness of stars north of south declination 30° were made in the same manner as is described farther on, in order to acquire practice in the work. The star atlas made use of throughout was Proctor's smaller Star Atlas, with the addition of all the other stars contained in the large maps published by the Society for Diffusing Useful Knowledge. Nearly all the stars contained in Lacaille's original Catalogue of 1942 stars and lying south of −30° declination were thus included. All the stars observed have been identified by comparison with the maps of the "Uranometria Argentina," with the exception of a few stars not contained in that work.

The observations were made by means of an opera-glass accurately focussed. The star undergoing observation was first brought into the centre of the field, and as soon as a satisfactory impression of its brightness had been received, comparison was made as quickly as possible with, usually, two comparison stars, one being a little brighter and the other a little fainter than the star observed. The star undergoing observation was then again brought into the field of the opera-glass and compared with the impression which had been received of the brightness of the comparison stars. This operation was generally repeated several times, until a perfectly satisfactory estimate of the brightness of the star relative to the comparison stars had been obtained, when the result was recorded. The adopted magnitudes of the comparison stars being known, the interval between any two of them was mentally divided into as many parts as there were tenths of a magnitude between them. By this means the value of a "step" was made to correspond with a tenth of a magnitude on the scale of the "Harvard Photometry." For example, the following observation of ν Hydri was made on Feb. 17, 1886:

$$\nu \text{ Hydri} = \iota \text{ Canis Majoris} + 4 = \mu \text{ Canis Majoris} - 3.$$

This means that ν Hydri was estimated 4 steps fainter than ι Canis Majoris and 3 steps brighter than μ Canis Majoris, each step being equal to a tenth of a magnitude on the scale of "Harvard Photometry." The resulting

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magnitude of ν Hydri, uncorrected for absorption, is 4·9. The different stars of a group of comparison stars generally agreed closely with this value of a step; though at times slight differences were noticed, due perhaps to change in the position angles of the stars of a group. No corrections were applied in such cases, but the stars observed were recorded as being so many steps (each equal to a tenth of a magnitude) brighter or fainter than each comparison star. Such differences, however, were never considerable, probably not exceeding at most two tenths of a magnitude.

The seven groups of comparison stars, with the adopted magnitudes from "Harvard Photometry," are given farther on and lettered A to G. An additional or sub-group H in the constellation Crux was also formed by numerous comparisons with the stars of Groups E and F. The magnitudes according to Bailey's "Southern Meridian Photometry" are added for comparison with the adopted magnitudes of the stars in the case of this sub-group, and also the number of observations on which the adopted magnitudes depend. Although there are some differences, it has been preferred to retain the adopted magnitudes rather than to use those of the "Southern Meridian Photometry," as not only were the former derived from observations made at the same time as the observations of the stars compared with this sub-group, but by so doing the present Catalogue is rendered entirely independent of the "Southern Meridian Photometry." The chief object in forming this sub-group was to prevent loss of time caused by the detached cumulus clouds, which are peculiarly characteristic of the trade-winds. When the stars undergoing observation are far distant from the comparison stars, it often happens that one or the other is hidden behind one of these clouds. But this inconvenience was in great measure averted by having the sub-group close to the stars observed.

Comparison Stars.

Group A.

	M.		M.
δ Capricorni	= 3·0	42 Capricorni	= 5·3
γ „	= 3·8	45 „	= 5·8
κ „	= 4·7		

Group B.

	M.		M.
β Ceti....	= 2·1	37 Ceti	= 5·0
η „	= 3·6	28 „	= 5·4
θ „	= 3·8	32 „	= 6·5
2 „	= 4·5		

Group C.

	M.		M.
γ Eridani..	= 3·0	ζ Eridani	= 4·8
ε „ ..	= 3·7	B.A.C. 1152 „	= 5·6
δ „ ..	= 3·7	14 „	= 6·1
π „ ..	= 4·4		

Group D.

	M.		M.
β Orionis..	= 0·3	η Orionis ..	= 3·5
ζ „ ..	= 1·9	ο „ ..	= 3·7
κ „ ..	= 2·2	31 „ ..	= 4·9

Group E.

	M.		M.
ε Canis Majoris	= 1·5	ν^3 Canis Majoris	= 4·7
β ,,	= 2·0	11 ,,	= 4·9
η ,,	= 2·4	μ ,,	= 5·2
22 ,,	= 3·5	17 ,,	= 5·9
γ ,,	= 4·1	H.P. 1342 ,,	= 6·1
ι ,,	= 4·5	B.A.C. 2244 ,,	= 6·5

Group F. (Bright Stars.)

	M.		M.
α Canis Majoris	= − 1·4	α Aquilæ	= 1·0
α Lyræ	= 0·2	α Tauri	= 1·0
β Orionis ..	= 0·3	β Tauri	= 1·9
α Canis Minoris	= 0·5		

Group G.

	M.		M.
α Scorpii	= 1·0	ω^1 Scorpii	= 4·1
δ ,, ...	= 2·5	ω^2 ,,	= 4·6
σ ,, ...	= 3·0	B.A.C. 5347 ,,	= 5·8

Sub-Group H.

	S.M.P. M.	Adopted Mag.	No. of Obs.
α Crucis	1·02	0·8	9
γ ,, ...	1·55	1·3	10
δ ,, ...	3·08	3·0	11
ε ,, ...	3·53	3·7	8
η ,, ...	4·31	4·3	7
ι ,, ...	4·71	4·9	8
L. 5185 ,, ...	..	5·7	4
L. 5251 ,, ...	..	6·0	3

It was originally intended that every star should be observed on at least three nights. This plan could not, however, be carried out completely owing to want of time. The number of stars contained in the Catalogue is 1081, and the total number of observations 2812, so that the average number of observations to each star is 2·6. But a great many stars were only observed on two nights, or even one.

Considering the circumstances under which the observations were made, the resulting magnitudes of the individual stars are, on the whole, in satisfactory agreement. The results are not so accordant as those contained in Sawyer's "Catalogue of the Magnitudes of Southern Stars from 0° to −30° Declination, to the Magnitude 7·0 inclusive." These were based on the method of "sequences," and appear to be exceptionally accurate. But the discordances appear to be no greater than, and in fact to be of the same order as, those of the photometric measures contained in Bailey's "Southern Meridian Photometry."* It will be well to state here some of the disadvantageous circumstances under which the observations were made. (1) Most of the observations were made on board ship, and, in addition to the inconvenience occasioned by the motion of the vessel, the rigging and sails frequently interfere in the case of a sailing ship, whilst in the case

* See note on p. ix.

of a steamer the smoke often constitutes a still more annoying hindrance. (2) Owing to the time at disposal being short, the observations were continued during moonlight or twilight, or under unfavourable conditions as regards clearness of the sky. (3) Variations in atmospheric absorption. (4) The frequent presence of thin local mist or vapour, often very slight and quite indefinite in outline. This last circumstance is undoubtedly the most prolific source of discordant observations. Slight local mists or vapours of this kind are only too common on or near the sea, and they were frequently so thin and indefinite, that it was often impossible to determine their presence, or whether a particular star was affected or not.

As the stars undergoing observation were usually at a distance from the comparison stars, it was necessary to correct the observations for differential atmospheric absorption. In Vol. xlvii. of the *Memoirs* of the Royal Astronomical Society, p. 417, Pritchard gave a table showing the atmospheric absorption at various zenith-distances as determined by him at Oxford and at Cairo respectively. After careful consideration of all the circumstances, it was decided to adopt the mean of Pritchard's two results as representing most probably the average absorption in the somewhat varying circumstances under which the observations were made. The following table contains the adopted absorptions for different altitudes.

Altitude.	Absorption.	Altitude.	Absorption.
°	M.	°	M.
70......	0·01	24......	0·32
60......	0·03	21......	0·39
50......	0·07	18......	0·49
45......	0·09	16......	0·58
40......	0·12	14......	0·69
35......	0·16	12......	0·83
30......	0·22	10......	1·04
27......	0·26		

This table contains of course only the average absorption, and considerable variations undoubtedly occurred from night to night and in different latitudes. As the total amount of the correction does not, however, exceed two or three tenths of a magnitude in the great majority of cases, these variations cannot have materially affected the results. Only where the altitude was very low can there be much uncertainty as to the amount of the correction. The altitudes of the stars observed, and of the comparison stars, were obtained by direct measurement on a celestial globe by Cary 21 in. in diameter, and the corrections were derived from these, by means of the above table, to within two or three hundredths of a magnitude.

No observation has been discarded altogether, as a discordant result may always be possibly due to variation. Mention is invariably made in the notes at the end of the Catalogue whenever an observation has been rejected in deriving the mean magnitude of a star, or where one was used with reduced weight. Also the whole of the observations of a star are given in these notes whenever the extreme observations differ by more than $0^{\mathrm{M}}{\cdot}55$. All the observations have likewise been given in a large number of cases of suspected variation, or where the observations in other catalogues are discordant. Excepting in a few instances, where the observations are numerous, the results are stated to the nearest half-tenth of a magnitude.

There are distinct signs of a systematic difference affecting the stars observed on several nights. On four nights in particular the observed magnitudes are generally considerably too bright compared with other observations of the same stars on other nights. Comparing the magnitudes on these four nights with the mean magnitudes, the following table shows the number of positive and negative residuals for each tenth of a magnitude

Date.	Positive Residuals.						Negative Residuals.						
	5	4	3	2	1	0	1	2	3	4	5	6	7
1885, Oct. 30....			–	2	5	6	5	8	1	–	1	–	–
„ „ 31....			–	4	5	9	11	3	2	1	1	1	–
1886, Feb. 28....			–	6	3	15	15	12	8	2	–	–	1
„ Mar. 1			1	1	6	11	10	10	3	3	–	–	–

for those cases in which the stars were observed on other nights besides the four in question. It will be seen that there is a great preponderance of negative residuals on each of the four nights. The preponderance of negative residuals is even more significant than would appear from the above table, as the mean magnitudes from which the residuals were derived were themselves dependent largely upon observations made on the suspected nights, and the observations of each star are generally only few in number. Moreover, on a good many occasions there are three observations of a star, two of which were made on suspected nights. This still further increases the significance of the preponderance of negative residuals. After full consideration of all the circumstances, it was decided to apply the following constant corrections to the observations of these four nights:—

M.
1885. Oct. 30 .... Correction = +0·2
„ „ 31 .... „ = +0·2
1886. Feb. 28 .... „ = +0·3
„ Mar. 1 .... „ = +0·2

These corrections are, if anything, too small rather than too large. Mist is noted as having been very troublesome on Oct. 30, and clouds as troublesome on Oct. 31. On Feb. 28 the sky was illuminated by very brilliant and nearly continuous flashes of lightning. There was also much haze or cloud at times. The night of Mar. 1 was remarkably clear, small stars being distinct almost down to the horizon. There was, however, misty cloud at times.

There are traces of a similar but less marked constant difference in the observations of several other nights. No corrections have, however, been applied to any observations other than those made on the above-mentioned four nights.

The comparison star employed by Bailey in the formation of the "Southern Meridian Photometry" was σ Octantis; but the brightness of this star was so checked by frequent comparisons with a number of stars of the "Harvard Photometry," that the former work ought to form a continuation of the latter, and the scales of the two catalogues should be the same, and this notwithstanding that the altitude of σ Octantis was very low at one of the stations occupied by him. It becomes a matter of great interest therefore, to make a comparison between the magnitudes of the present catalogue, based on direct comparison with stars of "Harvard Photometry," and those contained in the "Southern Meridian Photometry." But first, as a certain number of stars included in the present catalogue are also contained in the "Harvard Photometry," it will be desirable to compare these. The mean difference H.P. − W. from 44 stars common to the two catalogues is $-0^{\mathrm{M}}{\cdot}002$. It would appear therefore from this, that the present catalogue on the whole accords exactly with the "Harvard Photometry," though the number of stars is too small for absolute certainty.

TABLE I.—Comparison with S.M.P.

Mag. W.	No. of Stars.	S.M.P. − W.		Mag. W.	No. of Stars.	S.M.P. − W.	
		Unsmoothed.	Smoothed.			Unsmoothed.	Smoothed.
		M.	M.			M.	M.
−0·8	1	−·05	+·26	3·9	17	+·04	−·02
−0·5	1	+·75	+·26	4·0	18	−·02	−·02
+0·5	1	−·02	+·24	4·1	10	+·01	−·01
0·6	1	+·23	+·24	4·2	17	+·03	−·01
0·7	1	+·26	+·23	4·3	19	+·01	·00
1·2	1	+·29	+·20	4·4	24	−·02	·00
1·3	2	+·31	+·19	4·5	30	−·12	+·01
1·4	1	−·13	+·18	4·6	31	+·04	+·02
1·5	1	+·24	+·17	4·7	22	−·05	+·02
1·6	1	+·26	+·16	4·8	31	+·08	+·02
1·7	1	+·17	+·15	4·9	34	+·02	+·03
1·8	2	+·09	+·14	5·0	57	+·01	+·03
2·0	5	+·07	+·11	5·1	42	−·05	+·04
2·1	2	+·13	+·10	5·2	65	+·07	+·05
2·2	2	−·23	+·08	5·3	59	+·05	+·07
2·3	4	+·14	+·06	5·4	57	+·08	+·08
2·4	3	+·20	+·05	5·5	42	+·06	+·09
2·5	4	+·26	+·03	5·6	43	+·07	+·10
2·6	1	−·20	+·02	5·7	32	+·12	+·11
2·7	4	−·04	+·01	5·8	21	+·15	+·12
2·8	4	+·09	·00	5·9	15	+·07	+·10
2·9	4	−·04	−·01	6·0	16	+·04	+·07
3·0	2	−·06	−·01	6·1	12	−·04	+·01
3·1	6	+·09	−·02	6·2	6	−·08	−·04
3·2	6	−·05	−·02	6·3	3	+·10	−·10
3·3	11	−·01	−·03	6·4	2	−·54	−·15
3·4	11	+·04	−·03	6·6	1	−·35	....
3·5	7	+·01	−·03	6·8	1	−·11	....
3·6	11	+·02	−·03				
3·7	11	−·15	−·03				
3·8	12	+·15	−·02				

Table I. contains the results of a comparison of all the stars common to the "Southern Meridian Photometry" and the present catalogue for each tenth of a magnitude, excepting (1) known variable stars; (2) 4 stars almost certainly variable; (3) two or three instances of excessive discordance where the star was only observed once. The first column of the table contains the magnitude in the present catalogue; the second the number of stars compared; the third the unsmoothed, and the fourth column the smoothed residuals—S.M.P. – W. The values in the last column were found as follows:—The residuals contained in the third column were projected upon a chart in which the ordinates represent star-magnitudes, and the abscissæ residuals. A smooth curve was then drawn as exactly as possible through the resulting points, and the values in the last column were read off from this.

This table shows that there is a distinct difference of scale between the two catalogues. They practically agree between $2^{M}{\cdot}6$ and $4^{M}{\cdot}8$, but the magnitudes of the present catalogue are systematically brighter than those of the S.M.P. for stars fainter than the latter value, the difference, however, only amounting to $0^{M}{\cdot}12$ at maximum. There is, however, a more marked difference with respect to stars brighter than $2^{M}{\cdot}6$, the magnitudes according to the present catalogue being considerably brighter than those of the "Southern Meridian Photometry," and the difference at maximum amounting to about a quarter of a magnitude. The mean difference S.M.P.—W. is $+0^{M}{\cdot}04$ (851 stars). It is possible that the difference of scale is due to systematic error in the present catalogue, both bright and faint stars having been observed relatively brighter by W. than those of medium brightness. But it seems probable that, notwithstanding the precautions taken by Bailey, there is also a systematic difference between the "Southern Meridian Photometry" and the "Harvard Photometry." In other words, that the former is not exactly a continuation of the latter. Out of 64 stars common to these two last-mentioned catalogues there is a decided preponderance of + residuals, the mean difference S.M.P.—H.P. being $+0^{M}{\cdot}05$ *. This is almost identical with the mean difference S.M.P.—W. ($+0^{M}{\cdot}04$). The number of stars common to the "Southern Meridian Photometry" and "Harvard Photometry" is not large enough, however, to render any conclusion as to this quite certain.

Table II. contains the results of a similar comparison between the present catalogue and the "Uranometria Argentina." The differences are here much more considerable, as might be expected, seeing that the scale of the "Uranometria Argentina" differs largely from that of the "Harvard Photometry." Between $2^{M}{\cdot}8$ and $3^{M}{\cdot}4$ the two catalogues nearly correspond, but for brighter stars the magnitudes in the present one are brighter than those in the "Uranometria Argentina," the difference increasing nearly regularly with the increase in brightness. Between $3^{M}{\cdot}4$ and $5^{M}{\cdot}8$ there is a similar nearly regular increase in the brightness of the stars according to the present catalogue. But beyond $5^{M}{\cdot}8$ a sudden and very remarkable change takes place in the opposite direction, the magnitudes of the present catalogue becoming fainter again relative to those of the "Uranometria Argentina," until at $6^{M}{\cdot}9$ the two catalogues again coincide. Between $5^{M}{\cdot}8$ and $7^{M}{\cdot}2$ this remarkable change takes place at an exactly uniform rate. Since traces of a similar change are apparent in Table I., it is probable that it is peculiar to the present catalogue, and is due to some form of systematic error.

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* The sum of the residuals S.M.P. – H.P. without regard to sign is 13·18, from 64 stars. For 44 stars in like proportion this would be 9·06. The actual value from the 44 stars employed in the comparison between the present catalogue and the "Harvard Photometry" is exactly 9·06. This confirms the statement made on p. v, based on the general impression received in making the comparison between W. and the S.M.P., that the discordances of the present catalogue are of the same order as those of the "Southern Meridian Photometry." In other words, that the two catalogues are of about equal accuracy.

Table II.—Comparison with U.A.

Mag. W.	No. of Stars.	U.A.—W.		Mag. W.	No. of Stars.	U.A.—W.	
		Unsmoothed.	Smoothed.			Unsmoothed.	Smoothed.
		M.	M.			M.	M.
−0·8	1	+1·21	....	4·0	18	+·08	+·14
−0·5	1	+1·25	....	4·1	10	+·11	+·17
+0·5	1	+ ·47	+·63	4·2	17	+·25	+·19
0·6	1	+ ·60	+·60	4·3	20	+·33	+·22
0·7	1	+ ·54	+·57	4·4	23	+·22	+·24
1·2	1	+ ·50	+·41	4·5	30	+·20	+·27
1·3	2	+ ·67	+·37	4·6	30	+·36	+·29
1·4	1	·00	+·35	4·7	23	+·26	+·32
1·5	1	+ ·60	+·31	4·8	33	+·55	+·34
1·6	..	..	+·28	4·9	34	+·40	+·37
1·7	1	+ ·15	+·25	5·0	56	+·42	+·39
1·8	2	+ ·35	+·22	5·1	45	+·45	+·42
2·0	5	+ ·27	+·17	5·2	66	+·44	+·44
2·1	2	+ ·22	+·15	5·3	58	+·45	+·47
2·2	2	− ·07	+·12	5·4	61	+·50	+·50
2·3	3	+ ·08	+·10	5·5	49	+·50	+·53
2·4	3	+ ·28	+·08	5·6	56	+·53	+·56
2·5	5	+ ·26	+·06	5·7	59	+·61	+·59
2·6	1	− ·25	+·04	5·8	47	+·65	+·64
2·7	4	− ·06	+·03	5·9	32	+·56	+·59
2·8	4	+ ·26	+·02	6·0	38	+·48	+·53
2·9	4	+ ·23	+·01	6·1	18	+·47	+·46
3·0	2	− ·12	·00	6·2	15	+·40	+·40
3·1	6	+ ·21	·00	6·3	11	+·39	+·34
3·2	7	+ ·05	·00	6·4	7	+·28	+·28
3·3	10	·00	+·01	6·5	3	+·33	+·22
3·4	11	+ ·04	+·03	6·6	6	+·12	+·16
3·5	6	+ ·19	+·04	6·7	6	+·08	+·10
3·6	11	+ ·18	+·06	6·8	2	+·03	+·05
3·7	11	+ ·03	+·08	6·9	5	−·01	−·02
3·8	13	+ ·22	+·10	7·2	2	−·20	−·20
3·9	18	+ ·11	+·12				

The general arrangement of the Catalogue will be evident without explanation. The positions are taken from the "Uranometria Argentina" for all stars included in that work. The following abbreviations are used in the Catalogue or in the notes at the end of it.

U.A. The "Uranometria Argentina" of Gould.
S.M.P. The 'Southern Meridian Photometry" of Bailey, in Vol. 34 of the 'Annals' of Harvard College Observatory.
H.P. The "Harvard Photometry" of E. C. Pickering, in Vol. 14 of the 'Annals' of Harvard College Observatory.
L. or L.C. Lacaille's Catalogue of 9766 stars.
B.A.C. The British Association Catalogue of Stars.
B. To an observation Behrmann; to a catalogue number the Brisbane Catalogue of 7385 stars.

H. Houzeau. The magnitudes ascribed to this observer are taken from his "Atlas de toutes les Étoiles visibles à l'œil nu" (1878).
N.G.C. The "New General Catalogue of Nebulæ and Clusters of Stars" of Dreyer in *Memoirs* R.A.S., Vol. 49.
Ch. Chandler's "Third Catalogue of Variable Stars."
G. Gilliss' Catalogue of 1963 stars observed at Santiago.
P. Piazzi's Palermo Catalogue of Stars.
F. Flamsteed.
h. Herschel's Catalogue of Double Stars in his Cape Observations.

The observations of 1885-6 are given in the notes at the end of the Catalogue without any reference letter, and usually without the year in which they were made. No difficulty will be experienced from this latter omission, since the months of October, November, and December refer to 1885, and January, February, March, and April to 1886.

The colors of some of the stars have been added in the last column of the Catalogue. They were observed either with the opera-glass or with a 2¾-in. refractor.

One variable star, V Puppis, was discovered in the course of the observations. A list of 13 stars, probably variable*, has also been published in the *Astr. Nach.* Nos. 3440, 3450. The observations of these stars are so discordant that some at least of them will certainly turn out to be variable. Various other instances of probable or possible variation are referred to in the notes at the end of the Catalogue.

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* Nos. 36, 174, 180, 390, 460, 482, 563, 689, 732, 735, 859, 996, and 1019.

CATALOGUE.

No.	1875.		Constellation.	Let.	L. C.	Magnitude.			No.	
	R. A.	S. Decl.				U.A.	S.M.P.	W.		
	h m	° ′								
1.	0 3·1	46 26	Phœnix	ϵ	9742	3·8	3·85	3·9	5	
2.	4·3	82 55	Octans	γ^2	9756	5·6	5·25	5·0	2	
3.	4·5	73 55	Tucana		9755	6·8	..	6·0	2	
4.	5·4	35 50	Sculptor	θ	9760	5·4	5·06	4·95	1	
5.	8·5	85 41	Octans		23	6·4	5·78	5·85	2	
6.	8·6	35 36	Sculptor		18	6·4	..	5·85	1	
7.	10·2	76 36	Hydrus		30	6·7	..	5·8	1	
8.	10·5	71 5	Tucana		32	..	..	6·5	2	
9.	11·2	79 28	Hydrus		33	7·0	..	6·0	1	
10.	12·5	43 56	Phœnix		38	6·6	6·34	5·9	2	
11.	13·5	65 37	Tucana	ζ	40	4·1	4·28	3·95	2	
12.	14·8	70 19	Tucana	π	53	5·7	5·25	5·05	2	
13.	18·5	72 47	Tucana	ξ	80	cum	cum	3·95	2	cum.
14.	19·1	77 57	Hydrus	β	74	2·7	2·89	3·2	2	Pale yellow.
15.	20·0	44 22	Phœnix	κ	89	3·9	3·95	3·9	5	
16.	20·1	42 59	Phœnix	α	87	2·4	2·45	2·65	5	
17.	21·7	33 42	Sculptor	η	94	5·2	4·81	4·95	1	
18.	24·4	48 54	Phœnix		110	5·7	5·47	5·2	8	
19.	25·4	49 30	Phœnix	λ^1	115	4·6	4·80	4·5	8	
20.	25·6	63 39	Tucana	β	119 120	3·7	4·50 4·33	3·85	2	Yellow.
21.	27·0	63 43	Tucana		123	5·5	5·07	4·95	2	
22.	28 ±	72 40 ±	Tucana		..	..	..	6·8	1	
23.	28·1	71 57	Tucana	θ	139	6·4	5·99	5·4	2	
24.	29·7	48 41	Phœnix	λ^2	143	5·6	5·45	5·3	8	
25.	33·8	73 49	Tucana		173	6·8	..	6·0	2	
26.	35·4	46 46	Phœnix	μ	177	4·7	4·61	4·6	5	
27.	36·0	43 49	Phœnix		178	7·0	..	6·9	2	
28.	36·7	39 9	Sculptor	λ^1	183	6·0	6·12	5·55	2	Equal.
29.	38·1	39 7	Sculptor	λ^2	192	5·8	5·76	5·55	2	
30.	39·0	43 21	Phœnix		200	6·4	..	5·75	2	
31.	39·1	63 11	Tucana		U.A.64	6·4	..	5·25	2	
32.	39·9	48 14	Phœnix		207	6·2	5·71	5·45	2	
33.	43·1	47 23	Phœnix		226	6·6	6·11	5·9	2	
34.	44·2	44 5	Phœnix		231	6·7	6·31	6·35	2	
36.	47·6	70 11	Tucana	λ^1	250	6·4	6·56	5·4	2	Var.?
37.	0 48·4	63 33	Tucana		253	6·0	5·57	5·4	2	

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38.	0 50·3	70 12	Tucana	λ^2	262	5·5	5·37	5·0	2	
39.	53·2	61 22	Tucana		271	6·3	..	5·7	1	
40.	0 57·2	47 4	Phœnix		289	5·9	5·18	5·45	2	
41.	1 0·5	47 23	Phœnix	β	308	3·3	3·39	3·35	5	
42.	2·1	42 9	Phœnix	υ	312	5·4	5·15	4·9	4	
43.	2·3	62 27	Tucana	ι	316	5·6	5·23	5·25	2	
44.	7·0	38 31	Sculptor		328	6·1	5·86	5·45	3	
45.	9·5	46 12	Phœnix	ν	337	5·3	4·92	4·6	5	
46.	11·5	69 32	Tucana	κ	356	5·1	4·90	4·55	2	
47.	16·1	45 48	Phœnix		371	7·0	..	7·2	2	
48.	19·1	42 9	Phœnix		392	5·8	5·31	5·1	4	
49.	22·9	43 57	Phœnix	γ	419	3·4	3·32	3·45	5	
50.	26·0	49 43	Phœnix	δ	440	4·0	3·92	3·9	2	
51.	27·5	50 22	Phœnix		450	6·4	..	6·3	1	
52.	33·0	57 52	Eridanus	α	484	1·0	0·51	0·53	10	White.
53.	34·0	54 4	Eridanus		489	6·9	..	5·95	1	
54.	35·0	56 50	Eridanus	*p*	495	5·6	5·26	4·65	2	Orange-yellow.
55.	36·7	50 40	Phœnix		502	6·7	..	5·9	1	
56.	37·7	54 22	Eridanus	q^1	506	5·9	5·52	4·85	2	
57.	41·2	51 26	Phœnix		520	5·8	5·40	5·35	1	
58.	41·3	54 9	Eridanus	q^2	523	5·4	5·07	4·65	2	
59.	45·3	48 26	Phœnix		542	6·4	..	5·9	1	
60.	46·0	50 49	Phœnix		547	6·1	5·90	5·3	1	
61.	48·6	46 55	Phœnix	ψ	559	4·8	4·11	4·7	1	
62.	49·2	43 7	Phœnix	φ	565	5·5	4·95	4·65	3	
63.	49·4	68 34	Hydrus	η^1	577	var.	..	F	2	
64.	51·1	52 14	Eridanus	χ	575	3·9	3·62	3·75	2	Reddish?
65.	52·2	48 0	Phœnix		585	5·1	4·65	4·8	1	
66.	52·2	52 23	Eridanus		588	6·2	5·97	5·4	2	
67.	54·8	68 16	Hydrus	η^2	594	4·9	4·65	4·6	2	
68.	54·8	62 11	Hydrus	α	605	2·9	2·96	2·8	2	
69.	58·0	53 48	Eridanus		619	..	..	6·7	1	
70.	1 56·7	45 19	Phœnix	χ	610	5·6	4·91	5·1	1	
71.	2 4·2	44 6	Phœnix		647	6·1	5·78	5·75	1	
72.	5·1	44 24	Phœnix		659	6·5	..	6·05	1	
73.	12·0	52 5	Eridanus	φ	693	3·5	3·74	3·9	2	
75.	17·3	43 46	Phœnix		721	6·4	..	5·75	1	
76.	18·5	51 40	Eridanus		729	6·2	5·93	5·4	2	
77.	19·5	69 14	Hydrus	δ	747	4·1	4·24	3·85	2	
78.	21·4	60 52	Horologium	λ	752	5·8	5·35	5·35	2	
79.	22·4	48 17	Eridanus	κ	753	4·2	4·28	4·25	2	
80.	29·6	51 38	Horologium		799	6·5	..	5·75	2	
81.	30·5	63 8	Horologium		812	6·9	6·64	6·05	1	
82.	30·8	30 35	Fornax	ι^1	798	5·7	5·69	5·6	1	} Equal.
83.	32·9	30 44	Fornax	ι^2	811	5·7	5·62	5·6	1	
84.	33·3	53 5	Horologium	η	821	5·6	5·11	4·85	2	
85.	35·0	43 26	Eridanus	*s*	827	5·0	4·72	4·45	3	
86.	35·7	40 23	Eridanus	ι	831	4·2	3·92	4·05	3	
87.	36·8	55 5	Horologium	ζ	847	5·5	5·23	4·9	2	
88.	2 37·6	47 3	Eridanus		848	6·4	..	5·8	2	

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89.	2 37·7	68 48	Hydrus	ε	871	4·2	4·17	4·05	2	White.
90.	38·3	51 20	Horologium	ι	859	5·6	5·31	5·25	2	
91.	39·1	33 3	Fornax		855	6·4	6·09	5·75	1	
92.	40·2	53 6	Horologium		874	6·2	6·14	5·7	2	
93.	40·8	46 49	Eridanus		876	7·0	..	6·4	2	
94.	42·5	36 4	Fornax	η¹	879	6·7	..	6·7	1	
95.	43·6	68 8	Hydrus	ζ	907	5·2	4·79	4·65	2	White.
96.	43·6	37 55	Fornax		887	6·7	..	6·7	1	
97.	43·9	32 56	Fornax	β	888	4·5	4·16	4·45	1	
98.	45·2	36 22	Fornax	η²	897	6·1	5·69	5·6	1	
99.	45·6	36 11	Fornax	η³	899	5·4	5·29	5·5	1	
100.	46·0	40 27	Eridanus		902	6·5	6·32	6·0	1	
101.	51·3	75 35	Hydrus	ν	972	5·1	4·66	4·75	2	
102.	53·5	40 48	Eridanus	θ	950	2·6	3·13	3·4	3	
103.	2 59·4	44 23	Eridanus		976	7·0	..	6·6	1	
104.	3 2·0	72 23	Hydrus	θ	1001	5·8	5·36	5·3	2	
105.	8·4	30 16	Fornax		1015	6·4	6·04	5·95	1	
106.	14·9	43 33	Eridanus	e	1060	4·4	4·27	4·2	3	
107.	15·1	63 3	Reticulum	ζ¹	1074	6·0	5·47	5·05	2	White.
108.	15·5	62 59	Reticulum	ζ²	1077	5·7	5·13	4·85	2	White.
109.	16·6	67 23	Reticulum		1092	6·2	6·06	5·45	1	
110.	19·1	77 51	Hydrus	ι	1131	5·9	5·53	5·45	2	
111.	21·7	42 5	Eridanus		1107	6·5	..	5·5	1	
112.	25·8	41 48	Eridanus		1125	6·4	..	5·65	3	
113.	27·2	63 23	Reticulum	κ	1143	5·0	4·80	4·65	2	Yellowish wh.
114.	29·6	66 55	Reticulum		1164	6·1	5·72	5·45	3	White.
115.	32·6	40 41	Eridanus	y	1161	4·8	4·48	4·4	3	
116.	33·0	66 11	Reticulum		1188	7·0	..	6·25	2	White.
117.	37·3	32 20	Fornax	δ	1191	4·9	4·92	4·65	2	
118.	38·2	37 42	Eridanus	h	1198	4·8	4·42	4·45	2	
119.	42·6	65 12	Reticulum	β	1253	3·9	3·76	3·85	2	Yellowish.
120.	42·9	30 33	Fornax	ρ	1234	5·6	5·55	5·3	1	
121.	44·0	38 0	Eridanus	f	1244	4·3	4·52	4·15	2	
122.	44·8	36 35	Eridanus	g	1248	4·1	4·12	4·0	2	
123.	46·0	36 48	Eridanus		1254	7·0	..	5·5	1	
124.	48·9	35 6	Eridanus	i	1275	5·3	5·12	4·8	2	
125.	49·2	74 37	Hydrus	γ	1322	3·2	3·12	3·2	2	Deep yellow.
126.	54·4	63 49	Reticulum		1327	6·6	5·98	5·9	1	
127.	56·8	61 45	Reticulum	δ	1338	4·7	4·31	4·55	2	Yellow.
128.	59·1	62 30	Reticulum	γ	1357	4·7	4·41	4·45	2	Deep yellow.
129.	3 59·3	61 26	Reticulum	ι	1355	5·1	4·79	4·85	2	Yellow.
130.	4 0·7	31 23	Eridanus		1346	6·9	..	6·9	1	
131.	6·6	42 19	Horologium	δ	1382	5·3	4·78	4·6	2	
132.	8·5	44 41	Horologium		1390	7·0	6·73	6·1	1	
133.	9·9	42 36	Horologium	a	1398	3·8	3·79	4·0	2	Yellow.
134.	12·8	62 47	Reticulum	a	1423	3·3	3·35	3·2	2	Yellow.
135.	13·2	34 6	Eridanus	X	1411	3·3	3·76	3·4	3	
136.	14·3	59 36	Reticulum	ε	1428	4·6	4·39	4·5	2	Reddish wh.
137.	14·5	61 15	Reticulum		1430	6·7	6·35	5·75	1	White.
138.	4 15·3	44 34	Horologium		1424	5·8	5·05	5·05	2	

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139.	4 16·3	63 33	Reticulum		1443	6·3	6·12	5·65	2	Bluish white.
140.	18·5	35 50	Eridanus		1438	6·7	..	6·05	3	
141.	19·3	34 18	Eridanus	*d*	1441	4·0	3·94	3·65	3	
142.	20·3	35 2	Eridanus		1447	6·7	6·59	6·1	3	
143.	20·5	63 41	Reticulum	η	1473	5·8	5·18	5·25	2	Yellowish.
144.	21·4	44 27	Cœlum		1458	6·6	..	6·35	2	
145.	21·8	57 21	Doradus		1475	6·7	..	5·9	1	White.
146.	23·3	61 31	Reticulum		1496	6·4	..	5·75	1	Yellowish wh
147.	23·4	47 13	Cœlum		1479	6·5	6·22	5·75	1	
148.	25·5	30 44	Eridanus		1488	..	..	7·5	1	
149.	25·6	46 47	Cœlum		1498	6·4	6·32	5·75	1	
150.	26·1	35 55	Eridanus		1495	6·4	..	5·65	3	
151.	26·3	62 48	Reticulum		1523	6·1	5·84	5·45	1	
152.	26·5	80 30	Mensa	δ	1579	5·8	5·62	5·2	2	
153.	27·0	45 13	Cœlum	δ	1512	5·0	5·28	4·8	2	
154.	28·6	30 1	Eridanus	υ^1	1513	4·7	4·57	4·35	2	
155.	30·7	30 49	Eridanus	υ^2	1529	3·7	3·78	3·85	2	
156.	31·3	55 18	Doradus	α	1539	3·1	3·53	3·55	2	White.
157.	32·1	81 52	Mensa	ν	1639	5·7	5·81	5·25	2	
158.	35·3	62 19	Doradus	R	1567	..	..	..	1	Var.
159.	36·5	42 6	Cœlum	α	1556	4·6	4·55	4·35	2	
160.	37·5	83 10	Mensa		1707	6·9	6·75	6·1	1	
161.	37·6	37 23	Cœlum	β	1559	5·1	5·16	4·9	3	
162.	39·6	41 18	Cœlum		1578	6·5	..	5·7	2	
163.	41·2	34 14	Cœlum		1587	6·7	..	6·2	3	
164.	41·7	39 35	Cœlum		1594	6·4	..	5·75	2	
165.	42·5	59 58	Doradus	κ	1614	5·6	5·41	4·9	2	White.
166.	44·3	71 10	Mensa	μ	1654	5·6	5·75	5·25	1	
167.	44 7	44 12	Cœlum		1616	6·7	..	6·15	1	
168.	46·2	41 32	Cœlum		1626	6·3	5·92	5·7	2	
169.	46·9	35 7	Cœlum		1628	6·2	5·89	5·6	3	
170.	50·7	39 50	Cœlum		1658	6·5	5·75	5·8	2	
171.	58·8	75 8	Mensa	η	1752	6·0	5·23	5·5	2	
172.	59·5	49 20	Pictor	η^1	1717	5·5	5·44	5·2	2	
173.	4 59·9	35 39	Cœlum	γ	1712	4·7	4·59	4·45	3	
174.	5 0·0	35 53	Cœlum		1713	7·1	..	..	3	Var. ?
175.	1·7	49 45	Pictor	η^2	1728	5·3	4·91	5·0	2	
176.	3·4	57 39	Doradus	ζ	1744	4·8	4·70	4·65	2	White.
177.	4·3	71 29	Mensa	β	1778	5·7	5·25	5·3	3	
178.	5·9	61 58	Doradus		1776	..	..	7·3	1	
179.	6·6	63 33	Doradus		1772	5·7	5·24	5·0	1	
180.	9·3	35 58	Columba		1767	7·3	..	6·35	2	Var. ?
181.	10·1	36 7	Columba		1773	6·1	5·79	6·05	2	
182.	13·0	35 1	Columba	ο	1793	5·1	4·96	5·1	3	
183.	13·8	67 19	Doradus	θ	1828	5·1	4·75	4·7	2	
184.	15·8	34 49	Columba		1809	6·7	6·50	6·35	2	
185.	16·3	50 44	Pictor	ζ	1825	5·8	5·61	5·3	3	
186.	16·7	34 28	Columba		1813	6·4	..	6·05	2	
187.	19·3	39 48	Columba		1834	6·2	5·69	6·05	2	
188.	5 19·3	37 27	Columba		1833	..	..	6·45	3	

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189.	5 20·1	56 15	Pictor		1853	6·4	..	5·7	3	White.
190.	21·9	52 26	Pictor	θ	1863	6·0	6·28	5·35	3	
191.	23·1	41 3	Columba		1862	6·1	5·94	6·05	2	
192.	23·9	37 20	Columba		1868	5·9	5·66	5·8	2	
193.	24·5	59 1	Doradus	λ	1885	5·6	5·02	5·15	2	Yellowish.
194.	26·8	35 34	Columba	ε	1883	4·1	3·86	4·0	3	
195.	28·6	35 14	Columba		1890	6·4	5·60	6·15	2	
196.	28·6	38 36	Columba		1895	5·8	5·33	5·9	2	
197.	28·7	34 23	Columba		1892	6·9	..	6·55	2	
198.	29·5	64 1	Doradus		1922	6·5	..	5·75	2	White.
199.	32·3	64 19	Doradus		1949	5·9	5·34	5·3	2	White.
200.	32·5	62 34	Doradus	β	1948	3·9	3·70	4·05	2	Reddish yel.
201.	34·7	40 47	Columba		1941	5·7	5·93	5·95	3	
202.	35·1	34 8	Columba	α	1938	2·5	2·74	2·5	3	
203.	35·2	32 42	Columba		1936	5·9	5·39	5·5	2	
204.	36·8	76 26	Mensa	γ	2027	5·6	4·97	5·15	2	
205.	36·9	33 28	Columba		1955	6·6	..	6·2	2	
206.	37·4	30 36	Columba		1962	6·4	6·19	6·2	2	
207.	37·9	73 49	Mensa		2016	6·1	5·52	5·9	2	
208.	38·6	33 29	Columba		1968	..	..	6·65	3	
209.	40·1	45 53	Pictor		1981	6·7	..	6·0	2	
210.	41·3	32 21	Columba	μ	1982	5·4	5·36	5·05	3	
211.	43·0	46 39	Pictor		2003	5·8	5·12	5·4	2	
212.	43·3	78 53	Mensa	ι	2097	5·9	6·14	5·9	2	
213.	44·3	51 7.	Pictor	β	2021	3·9	3·92	3·9	2	
214.	44·5	41 38	Columba		2005	..	..	6·7	2	
215.	44·5	65 47	Doradus	δ	2045	4·5	4·49	4·5	2	White.
216.	46·5	35 49	Columba	β	2029	2·9	3·06	3·0	3	Yellow.
217.	47·1	80 34	Mensa	π	2138	5·8	5·61	5·25	2	
218.	47·5	56 12	Pictor	γ	2053	4·7	4·29	4·35	3	Deep reddish [yel.
219.	48·6	38 33	Columba		2046	..	..	6·5	2	
220.	48·1	52 8	Pictor		2052	5·6	4·75	5·05	3	
221.	48·3	37 39	Columba		2041	6·2	5·59	5·65	3	
222.	48·6	33 50	Columba	λ	2044	5·2	5·00	4·9	3	
223.	50·0	66 56	Doradus	ε	2093	5·1	4·98	5·0	2	
224.	50·2	57 11	Pictor		2080	6·6	5·94	5·9	2	White.
225.	50·3	72 44	Mensa	λ	2111	6·9	..	6·35	1	
226.	50·7	64 4	Doradus		2091 ?	6·8	..	F	1	
227.	50·8	39 59	Columba		2067	5·8	5·49	6·05	2	
228.	51·2	37 8	Columba	ξ	2069	5·4	4·93	5·2	3	
229.	51·6	31 24	Columba	σ	2070	5·6	5·54	5·5	3	
230.	52·1	52 40	Pictor		2087	5·8	5·25	5·0	3	
231.	53·1	35 18	Columba	γ	2084	4·5	4·49	4·35	3	
232.	53·1	63 8	Doradus		2106	4·9	4·41	4·8	2	
233.	53·6	64 30	Doradus		2113	6·9	..	5·75	1	
234.	54·9	44 3	Pictor		2098	6·5	..	5·8	1	
235.	55·3	42 49	Columba	η	2099	4·0	4·00	4·1	4	Yellowish.
236.	56·7	33 55	Columba		2108	5·9	5·39	6·1	2	
237.	5 58·7	79 23	Mensa	κ	2210	5·5	5·53	5·2	2	

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238.	6 0·9 1·1	45 2 45 5	Puppis		2137 2141	..	..	5·35	2	
239.	2·6	34 18	Columba		2142	6·1	6·16	6·1	2	
240.	2·8	42 17	Columba	π^1	2154	6·8	..	5·8	3	
241.	3·2	37 14	Columba	θ	2153	5·3	5·36	4·9	3	
242.	4·0	42 8	Columba	π^2	2164	5·8	5·53	5·45	3	
243.	4·9	44 20	Puppis		2174	6·6	..	5·85	2	
244.	6·0	66 1	Doradus	η^1	2203	6·0	5·84	4·7	1	
245.	6·1	40 20	Columba		2182	6·0	5·53	6·15	2	
246.	7·9	54 56	Pictor	δ	2201	5·2	4·84	4·5	2	White.
247.	9·5	68 49	Doradus	ν	2227	5·2	5·21	5·05	2	White.
248.	11·0	65 34	Doradus	η^2	2230	5·5	4·81	5·6	1	
249.	12·1	35 6	Columba	κ	2213	4·8	4·50	4·4	3	
250.	12·5	39 13	Columba		2214	6·4	..	6·15	2	
251.	12·8	37 42	Columba		2217	5·8	5·67	5·75	3	
252.	12·9	37 12	Columba		2218	6·4	6·07	5·95	3	
253.	14·0	74 42	Mensa	α	2283	5·3	5·20	5·1	1	
254.	15·2	34 21	Columba		2228	6·3	..	5·85	3	
255.	15·7	50 18	Puppis		2241	7·0	6·88	5·9	2	Var. ?
256.	16·1	34 5	Columba		2234	6·0	5·57	5·65	3	
257.	17·5	33 22	Columba	δ	2244	3·9	3·84	3·95	3	Yellowish.
258.	16·6	66 34	Doradus		2275	..	..	6·05	1	
259.	19·7	36 39	Columba		2265	5·9	5·57	5·15	2	
260.	20·7	56 18	Pictor	ν	2292	6·0	5·77	5·3	3	
261.	21·2	52 38	Carina	α	2291	0·4	−0·96	−0·81	18	White.
262.	21·9	58 28	Pictor		2303	6·7	6·65	5·8	2	
263.	22·4	48 6	Puppis	G	2297	5·9	5·98	5·5	3	
264.	22·7	60 13	Pictor		2311	6·1	6·04	5·4	2	
265.	23·5	32 30	Canis Major	λ	2295	4·7	4·60	4·7	3	
266.	23·8	69 55	Doradus	π^1	2340	6·1	5·60	5·35	2	Yellowish wh.
267.	24·0	32 17	Canis Major		2300	6·5	6·00	5·55	3	
268.	24·1	63 45	Pictor		2329	6·7	..	5·75	2	
269.	25·1	57 55	Pictor		2328	6·3	5·77	5·7	2	
270.	26·5	69 37	Doradus	π^2	2368	5·9	5·44	5·35	2	Yellowish wh.
271.	26·7	50 9	Puppis		2333	5·5	5·34	5·3	3	
272.	27·3	56 46	Pictor		2343	6·9	5·25	5·05	1	
273.	28·0	31 56	Canis Major		2330	6·0	5·93	5·5	3	
274.	29·9	61 47	Pictor		2377	6·4	..	5·65	2	
275.	29·9	32 47	Canis Major		2347	6·1	5·93	5·25	3	
276.	30·1	58 40	Pictor	μ	2373	6·0	5·82	5·35	2	
277.	32·2	52 52	Carina	N	2383	4·8	4·46	4·45	3	
278.	33·1	32 14	Canis Major		2374	5·7	5·17	5·2	3	
279.	33·9	43 5	Puppis	ν	2386	3·5	3·23	3·2	4	
280.	35·3	48 6	Puppis		2402	5·3	4·99	5·2	3	
281.	36·7	61 25	Pictor		2432	6·6	..	5·85	2	
282.	37·4	47 33	Puppis		2421	6·8	..	6·0	2	
283.	39·7	30 57	Canis Major		2429	5·7	5·05	5·15	3	
284.	43·1	37 48	Puppis	x	2455	5·3	5·30	5·25	3	
285.	45·2	32 22	Canis Major	κ	2474	4·0	3·90	4·05	5	
286.	6 45·7	31 34	Canis Major		2479	6·3	5·70	5·45	3	

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287.	6 46·3	34 13	Puppis		2486	5·4	4·93	5·0	3	
288.	46·4	46 29	Puppis		2492	5·4	5·12	5·4	3	
289.	46·8	50 28	Puppis	τ	2505	3·2	2·76	2·95	4	Yellow.
290.	46·9	61 48	Pictor	α	2525	3·5	3·29	3·4	2	Yellowish wh.
291.	47·1	53 29	Carina	A	2511	4·8	4·35	4·5	3	Reddish wh.
292.	47·3	36 5	Puppis		2493	6·2	6·10	5·75	3	
293.	50·4	80 41	Mensa	ζ	2648	5·8	5·62	5·1	2	
294.	52·9	70 48	Volans	ι	2597	5·6	5·53	5·4	2	
295.	52·9	48 33	Puppis		2557	5·5	4·91	5·25	2	
296.	53·8	33 57	Puppis	*t*	2554	5·4	5·20	5·05	4	
297.	6 58·4	43 13	Puppis		2600	6·8	..	6·25	2	
298.	7 0·0	67 45	Volans		2646	5·7	5·02	5·35	2	
299.	0·1	42 9	Puppis	C	2607	5·5	5·25	5·35	3	
300.	0·1	43 26	Puppis		2608	5·8	5·48	5·55	3	
301.	0·6	49 24	Puppis	H	2624	5·3	5·18	5·1	3	
302.	2·0	56 34	Carina		2642	5·7	5·31	5·2	2	
303.	3·0	40 42	Puppis		2638	6·2	5·97	5·75	3	
304.	4·4	79 14	Mensa	θ	2758	5·6	5·46	5·1	2	
305.	4·6	39 27	Puppis	A	2649	5·3	4·87	5·0	3	
306.	7·4	48 44	Puppis		2673	5·6	5·08	5·25	3	
307.	8·1	40 17	Puppis	E	2672	5·7	5·50	5·4	3	
308.	9·0	46 33	Puppis	I	2687	4·8	4·54	4·7	3	
309.	9·5	44 58	Puppis	L^1	2690	5·3	5·08	5·08	30	Bluish white.
310.	9·7	44 26	Puppis	L^2	2691	..	..	..	35	Var.
311.	9 8	70 18	Volans	γ	2746	3·8	3·62	3·75	2	Yellow.
312.	11·2	48 3	Puppis		2711	5·0	4·88	4·95	3	
313.	12·4	36 22	Puppis		2714	5·6	5·20	5·2	2	White.
314.	12·7	36 52	Puppis	π	2720	2·7	2·49	2·45	34	Var. ?
315.	13·9	36 30	Puppis	υ^1	2733	5·3	4·80	4·85	2	White.
316.	14·2	36 31	Puppis	υ^2	2736	5·4	5·33	5·0	2	White.
317.	14·2	43 46	Puppis		2742	6·3	5·98	5·6	3	
318.	14·3	38 59	Puppis	F	2739	5·8	5·33	5·35	3	
319.	16·9	67 44	Volans	δ	2809	4·1	3·92	4·05	2	
320.	19·4	35 36	Puppis		2790	6·6	..	5·45	1	
321.	22·1	33 53	Puppis		2810	6·5	..	5·75	2	
322.	24·3	31 12	Puppis		2823	6·4	6·10	5·5	2	
323.	24·8	38 33	Puppis	*y*	2832	5·9	5·63	5·6	1	
324.	25·3	43 3	Puppis	σ	2837	3·5	2·99	3·35	4	Yellow.
325.	25·8	30 42	Puppis		2834	5·3	4·72	4·75	2	
326.	32·5	78 50	Mensa	ε	2993	6·0	5·43	5·3	2	
327.	35·0	38 1	Puppis	d^1	2909	5·4	5·13	4·8	4	
328.	35·3	37 51	Puppis	d^2	2912	6·6	5·93	5·5	3	
329.	36·0	31 22	Puppis		2916	..	..	F	1	
330.	39·1	44 51	Puppis		2950	5·6	5·08	5·3	3	
331.	39·4	40 38	Puppis		2945	5·7	5·10	5·25	4	
332.	40·8	37 40	Puppis	*c*	2958	3·6	3·40	3·55	5	Reddish orange
333.	43·3	72 18	Volans	ζ	3056	4·3	3·82	3·95	2	
334.	43·7	46 18	Puppis		3003	5·9	5·28	5·2	3	
335.	44·6	46 46	Puppis	Q	3017	5·1	4·68	4·75	3	
336.	7 45·4	46 3	Puppis	P	3022	4·3	4·11	4·15	3	

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337.	7 47·9	40 15	Puppis	a	3044	4·0	3·72	3·7	4	Yellow.
338.	48·2	38 32	Puppis	b	3049	4·9	4·67	4·45	4	White.
339.	49·5	54 3	Carina		3074	6·1	5·95	5·6	2	
340.	49·5	49 17	Puppis		3069	5·0	4·81	4·65	9	
341.	49·6	47 47	Puppis	J	3068	4·5	4·28	4·3	3	
342.	53·6	52 39	Carina	χ	3102	3·7	3·56	3·7	6	
343.	54·6	48 54	Puppis	V	3105	..	..	..	9	Var.
344.	55·1	38 57	Puppis		3103	5·9	5·20	5·4	3	White.
345.	57·8	53 48	Carina		3135	6·3	..	5·45	2	
346.	58·6	55 6	Carina		3144	6·6	6·43	5·85	2	
347.	58·7	63 13	Carina	D	3154	5·2	4·97	5·0	3	
348.	7 59·2	39 39	Puppis	ζ	3136	2·5	2·33	2·1	5	White.
349.	8 2·9	62 29	Carina		3178	6·5	6·40	5·75	2	
350.	5·7	46 58	Vela	γ	3185	cum	1·91	1·65	4	
351.	6·6	55 43	Carina		3208	6·0	5·75	5·5	2	
352.	6·8	63 26	Carina		3224	6·6	..	5·8	2	
353.	6·9	39 15	Puppis	h^1	3191	4·8	4·27	4·55	3	
354.	6·9	60 55	Carina	B	3222	5·3	4·82	4·8	3	
355.	7·2	42 37	Puppis		3197	5·3	4·85	4·55	1	
356.	7·5	68 15	Volans	e	3242	4·5	4·45	4·55	2	
357.	9·6	39 58	Puppis	h^2	3223	4·8	4·30	4·6	3	
358.	13·4	62 32	Carina	C	3275	5·7	5·30	5·05	3	
359.	15·4	58 46	Carina		3289	6·8	..	6·0	2	
360.	16·5	32 39	Puppis	w	3277	5·7	4·77	5·25	3	
361.	16·9	65 13	Volans		3313	5·7	4·96	5·15	2	
362.	18·4	57 34	Carina		3315	6·4	6·14	5·65	2	
363.	18·7	48 5	Vela	B	3308	5·4	4·83	4·9	3	
364.	19·9	59 6	Carina	ε	3327	2·1	1·74	1·5	4	Deep yellow.
365.	21·7	76 31	Chamæleon	α	3400	4·2	4·06	4·15	2	
366.	23·2	73 0	Volans	η	3396	5·7	5·38	5·25	2	
367.	24·3	77 5	Chamæleon	θ	3435	4·7	4·19	4·35	2	Yellow.
368.	24·4	65 43	Volans	β	3384	3·9	3·61	3·8	3	Yellow.
369.	25·1	47 31	Vela	A	3367	6·0	5·51	5·35	3	
370.	27·0	69 41	Volans		3424	6·0	5·58	5·85	1	
371.	30·9	49 31	Vela	C	3428	5·6	4·91	5·2	3	
372.	32·1	50 32	Vela		3443	6·4	..	5·6	3	
373.	32·4	57 47	Carina	e^1	3452	5·9	5·40	5·3	2	
374.	32·4	57 35	Carina	e^2	3451	5·4	4·76	5·05	2	
375.	33·2	42 33	Vela	e	3446	4·6	4·08	4·35	3	
376.	35·1	62 25	Carina		3475	6·0	5·38	5·45	2	
377.	35·2	34 52	Pyxis	β	3462	4·4	3·92	4·3	3	
378.	36·5	46 12	Vela	b	3470	4·1	3·71	3·9	6	
379.	36·7	52 29	Vela	o	3482	4·0	3·58	3·7	4	
380.	37·7	44 58	Vela		3486	5·9	5·21	5·35	4	
381.	37·8	59 19	Carina	d	3504	4·7	4·40	4·55	4	
382.	38·6	32 44	Pyxis	α	3487	3·8	3·72	3·75	3	
383.	38·6	69 56	Volans	θ	3536	5·6	5·22	5·15	2	
384.	39·9	42 11	Vela	d	3508	4·4	3·98	4·2	3	
385.	41·2	54 15	Vela	δ	3532	2·2	2·00	1·85	3	White.
386.	8 41·8	45 35	Vela	a	3526	4·1	4·01	3·9	6	Yellow.

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387.	8 42·1	58 16	Carina		3545	6·7	..	5·85	2	
388.	42·8	65 22	Volans		3562	6·5	..	5·55	2	
389.	43·5	56 19	Carina	*f*	3554	5·1	4·65	4·7	4	
390.	44·8	32 19	Pyxis		3549	5·8	5·17	6·1	2	Var.?
391.	45·5	44 51	Vela	*g*	3565	5·7	4·94	5·05	6	
392.	45·5	78 30	Chamæleon	η	3623	5·6	5·68	5·3	2	
393.	47·4	78 38	Chamæleon		3644	6·7	..	5·6	2	
394.	48·4	57 10	Carina		3594	6·3	5·73	5·4	2	
395.	48·9	66 20	Volans		3609	5·9	5·39	5·5	3	
396.	50·4	79 2	Chamæleon		3669	6·4	..	5·9	2	
397.	51·7	57 46	Carina		3618	6·9	..	5·75	2	
398.	52·2	60 10	Carina	*c*	3626	4·0	3·95	4·15	3	
399.	53·9	58 45	Carina	b^1	3639	5·4	5·09	4·7	2	
400.	56·3	58 36	Carina	b^2	3661	5·7	5·23	4·9	2	
401.	57·9	60 28	Carina		3673	6·5	..	5·65	2	
402.	8 59·8	46 36	Vela	*c*	3677	4·6	3·74	3·8	3	Yellowish.
403.	9 0·5	65 54	Volans	*a*	3696	4·2	4·13	4·05	4	
404.	3·4	42 56	Vela	λ	3699	2·5	2·10	2·0	4	Deep yellow.
405.	4·6	70 2	Carina	E	3730	5·2	4·76	4·55	5	
406.	4·8	72 6	Carina	G	3736	4·8	4·53	4·45	5	
407.	6·5	44 21	Vela		3723	5·6	5·04	5·4	3	
408.	7·7	58 27	Carina	*a*	3738	3·8	3·51	3·7	8	
409.	8·4	61 48	Carina	*i*	3753	4·3	4·20	4·45	4	
410.	9·6	64 21	Carina		N.G.C. 2808	7·0	..	6·0	1	Neb.
411.	9·6	58 54	Carina		3760	6·1	5·56	5·7	2	
412.	9·7	42 43	Vela	*z*	3749	5·9	5·34	5·5	3	
413.	10·0	37 5	Vela		3748	6·6	..	5·75	7	
414.	10·6	55 3	Vela		3762	6·0	5·19	5·5	1	
415.	10·7	38 3	Vela	*l*	3756	5·5	4·80	5·0	7	
416.	10·7	36 54	Vela	*k*	3755	5·1	4·70	4·75	7	
417.	11·8	69 12	Carina	β	3791	2·0	1·73	1·3	3	
418.	11·9	57 52	Carina		3776	6·7	..	5·85	2	
419.	12·7	57 1	Carina	*g*	3782	4·8	4·16	4·5	5	
420.	13·7	58 45	Carina	ι	3792	2·5	2·24	2·05	4	Yellow.
421.	13·9	50 31	Vela	K	3786	5·8	5·34	5·2	3	
422.	14·4	85 9	Octans	ζ	3953	5·7	5·46	5·55	2	
423.	15·4	31 14	Pyxis		3790	6·9	..	6·1	2	
424.	17·6	74 12	Carina		3845	6·4	5·98	5·45	2	
425.	17·6	74 22	Carina		3846	5·7	5·38	5·05	2	
426.	17·9	61 52	Carina	*k*	3823	5·5	4·82	4·95	4	
427.	18·3	54 29	Vela	κ	3816	2·7	2·59	2·35	3	White.
428.	24·0	64 23	Carina		3890	6·6	..	5·75	3	
429.	24·1	35 24	Antlia	ε	3861	5·0	4·40	4·7	2	
430.	25·4	31 20	Antlia	ζ^1	3880	6·1	6·13	5·5	3	
431.	25·8	39 55	Vela	ψ	3885	3·7	3·53	3·6	5	
432.	25·9	71 3	Carina		3914	6·0	5·44	5·4	4	
433.	26·2	31 19	Antlia	ζ^2	3884	6·3	6·00	5·6	3	
434.	27·4	40 6	Vela		3900	6 0	5·37	5·4	8	[yellow.
435.	9 27·4	56 29	Vela	N	3910	..	..	.	2	Var. Deep

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436.	9 28·2	80 15	Chamæleon	ι	3981	5·8	5·32	5·65	2	
437.	29·1	62 14	Carina	R	3932	..	..	..	2	Var.
438.	29·3	48 27	Vela		3917	5·6	5·31	5·15	3	
439.	29·8	50 42	Vela	L	3925	5·5	5·18	5·0	3	
440.	30·6	72 32	Carina	H	3968	5·9	5·48	5·35	5	
441.	30·8	58 40	Carina	*h*	3949	4·9	4·18	4·2	4	
442.	31·8	31 37	Antlia		3939	6·2	5·57	5·5	3	
443.	32·3	48 48	Vela	M	3952	4·9	4·41	4·5	3	
444.	33·1	42 38	Vela	*y*	3956	6·0	5·41	5·7	3	
445.	33·2	64 23	Carina		3973	7·0	..	5·8	2	
446.	35·9	60 46	Carina	*m*	3987	5·1	4·56	4·4	3	
447.	36·9	57 25	Carina		3990	6·0	5·38	5·55	3	
448.	37·5	80 23	Chamæleon	ζ	4048	5·5	5·21	5·0	2	
449.	41·6	44 11	Vela		4022	6·0	5·74	5·45	2	
450.	41·7	56 37	Carina		4028	6·9	..	5·9	2	
451.	41·8	61 56	Carina	*l*	4033	..	..	..	4	Var. Yellow.
452.	42·1	58 13	Carina		4032	6·9	..	5·75	2	
453.	44·0	64 29	Carina	υ	4051	3·4	2·99	2·8	3	
454.	44·6	55 50	Vela		4049	6·7	..	5·95	3	
455.	46·3	76 12	Chamæleon	ν	4081	6·1	5·39	6·25	1	
456.	48·7	54 47	Vela		4067	6·8	6·73	6·0	1	
457.	52·5	53 58	Vela	φ	4093	3·9	3·67	3·55	4	
458.	52·8	79 28	Chamæleon		4139	6·8	..	6·65	1	
459.	9 53·5	35 18	Antlia	η	4095	5·6	5·30	5·3	1	
460.	10 0·3	50 42	Vela		4152	6·5	..	..	4	Var.?
461.	1·4	51 35	Vela		4156	var.	..	6·5	2	
462.	4·0	81 37	Chamæleon	μ	4232	6·0	5·57	5·5	2	
463.	4·2	51 12	Vela	Q	4172	5·3	5·16	5·0	4	
464.	5·2	65 12	Carina		B. 2871	5·7	5·36	5·7	2	
465.	6·4	80 57	Chamæleon		4246	7·0	6·56	6·15	2	
466.	7·9	32 25	Antlia		4196	6·7	..	5·9	2	
467.	8·4	39 44	Antlia		4202	6·4	5·96	5·7	3	
468.	8·6	50 37	Vela		4206	5·8	5·56	5·2	4	
469.	9·5	41 30	Vela	*q*	4212	4·0	3·96	4·0	7	
470.	10·0	65 45	Carina	M	4233	5·7	5·39	5·25	3	
471.	10·8	69 25	Carina	ω	4243	3·6	3·61	3·2	3	
472.	12·9	60 42	Carina	*q*	4249	3·3	3·42	3·7	2	Orange.
473.	14·9	54 24	Vela		4263	5·4	4·47	5·05	2	
474.	16·3	55 25	Vela	J	4272	5·0	4·44	4·9	2	
475.	18·0	37 23	Antlia		4278	5·7	5·51	5·45	1	
476.	19·3	66 16	Carina	L	4296	5·4	5·38	5·25	2	
477.	21·4	30 26	Antlia	α	4298	4·4	4·23	3·85	3	Yellow. Var.?
478.	21·9	73 24	Carina	I	4319	4·3	4·02	3·65	3	
479.	22·7	57 0	Carina		4310	5·4	4·91	4·85	4	
480.	23·3	58 6	Carina	*s*	4314	4·6	4·05	4·05	3	
481.	23·5	65 4	Carina		4321	6·6	6·12	5·75	2	
482.	23·8	29 58	Antlia	δ	4309	6·0	5·82	5·15	3	Var.?
483.	24·9	64 32	Carina		4331	..	..	6·15	1	
484.	26·5	53 5	Vela		4336	5·6	5·07	4·8	3	
485.	10 27·2	71 21	Carina	K	4357	5·0	4·91	4·7	3	

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486.	10 27·6	61 3	Carina	*p*	4348	3·6	3·62	3·45	3	Yellow.
487.	27·7	46 22	Vela	*t*	4344	5·6	5·09	5·05	3	
488.	28·1	72 35	Carina		4367	5·6	4·82	5·0	3	
489.	30·8	56 55	Carina	*r*	4373	5·3	4·55	4·8	3	Deep yellow.
490.	31·7	58 55	Carina	t^1	4380	5·5	5·28	5·2	4	
491.	32·0	47 35	Vela	*P*	4378	4·1	3·99	3·8	3	
492.	32·5	81 17	Chamæleon		4430	..	..	6·2	1	
493.	33·1	75 40	Chamæleon		4411	6·8	..	6·75	1	
494.	34·0	77 58	Chamæleon	γ	4428	4·4	4·09	4·1	1	
495.	34·0	58 32	Carina	t^2	4396	5·2	4·74	5·05	4	
496.	34·3	54 57	Vela	*x*	4398	4·8	4·40	4·2	3	
497.	36·9	32 4	Antlia		4415	5·9	5·92	5·8	2	
498.	37·8	63 49	Carina		4440	5·7	5·18	4·35	3	
499.	38·5	63 44	Carina	θ	4447	2·9	3·01	2·55	5	
500.	38·8	59 55	Carina	*w*	4446	5·2	4·44	5·0	3	
501.	38·8	50 14	Vela		h. 4352	..	..	6·4	1	
502.	40·2	59 2	Carina	η	4457	..	..	..	2	Var.
503.	40·5	79 8	Chamæleon		4489	6·5	..	5·95	1	
504	40·6	70 12	Carina		4467	6·9	6·26	5·8	1	
505.	41·4	48 46	Vela	μ	4461	2·9	2·81	2·55	3	Pale yellow.
506.	41·9	56 6	Vela		4468	5·8	5·47	5·05	3	
507.	44·0	79 49	Chamæleon	δ^1	4509	6·2	5·48	5·35	2	
508.	44·6	79 53	Chamæleon	δ^2	4513	4·9	4·62	4·6	2	
509.	47·4	56 35	Carina		4507	6·0	5·67	5·1	2	
510.	48·4	75 13	Chamæleon		4528	6·9	6·74	6·85	1	
511.	48·4	58 11	Carina	*u*	4515	4·1	3·85	4·1	2	
512.	49·6	70 3	Carina		4531	6·5	6·06	5·8	1	
513.	50·4	78 54	Chamæleon		4544	6·9	..	6·55	1	
514.	50·9	36 28	Antlia	ι	4527	5·1	4·61	5·0	2	
515.	53·3	33 4	Hydra		4540	6·0	5·83	5·9	2	
516.	54·7	31 10	Hydra		4552	6·3	6·19	6·0	2	
517.	10 57·7	80 53	Chamæleon		4605	7·0	6·64	6·2	1	
518.	11 0·1	83 53	Octans	η	4643	6·3	6·22	5·85	2	
519.	1·2	31 55	Hydra		4599	6·8	..	6·1	2	
520.	2·3	70 12	Carina		4625	6·1	5·86	5·65	1	
521.	3·9	31 41	Hydra		4623	5·9	5·84	5·6	2	
522.	6·2	31 45	Hydra		4642	6·7	..	6·1	2	
523.	7·6	63 29	Carina		4657	5·7	5·53	5·4	2	
524.	14·9	78 59	Chamæleon		4729	6·6	6·30	6·65	1	
525.	15·3	53 48	Centaurus	π	4717	4·3	4·38	4·25	4	
526.	17·2	35 29	Centaurus		4728	5·4	5·00	5·25	2	
527.	17·5	56 6	Centaurus		4734	6·6	..	5·8	1	
528.	18·0	64 16	Musca.		4737	5·7	5·43	5·15	2	
529.	19·4	35 23	Centaurus		4739	5·7	5·44	5·4	2	
530.	20·3	63 17	Centaurus		4747	5·7	5·34	5·5	2	
531.	26·0	58 45	Centaurus	o^1	4774	5·2	4·93	5·3	3	
532.	26·0	58 49	Centaurus	o^2	4775	5·5	5·30	5·45	3	
533.	26·7	39 45	Centaurus		4778	6·2	5·67	5·65	3	
534.	26·7	30 24	Hydra		4776	5·8	4·94	5·65	2	
535.	11 26·9	31 10	Hydra	ξ	..	3·7	3·65	3·1	2	

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536.	11 27·5	39 54	Centaurus		4785	5·7	5·61	5·35	3	
537.	28·4	32 10	Hydra		4788	6·2	6·17	5·85	2	
538.	28·8	53 34	Centaurus	A	4794	5·2	4·79	5·05	4	
539.	31·2	30 26	Hydra		P.XI,124	..	..	6·3	2	
540.	30·0	62 20	Centaurus	λ	4804	3·4	3·31	3·4	5	
541.	30·4	32 53	Hydra		4800	6·2	5·85	5·6	2	
542.	30·8	32 18	Hydra		4808	6·7	..	5·9	2	
543.	32·1	75 12	Chamæleon	π	4831	6·2	5·66	6·05	1	
544.	32·3	61 8	Centaurus		B.3689	6·0	5·38	5·55	3	
545.	33·7	64 42	Musca		4843	5·8	5·08	5·5	2	
546.	34·0	34 3	Hydra	ο	4839	4·9	4·98	4·5	2	
547.	35·0	61 24	Centaurus		4856	5·7	4·85	5·3	4	
548.	35·5	31 48	Hydra		4857	5·7	4·98	5·25	2	
549.	37·6	61 48	Centaurus		4868	5·8	5·17	5·25	4	
550.	37·6	78 37	Chamæleon		4874	6·8	..	6·75	1	
551.	39·5	45 0	Centaurus		4878	5·9	5·42	5·3	5	
552.	39·7	66 2	Musca	λ	4883	3·8	3·77	4·05	2	
553.	40·5	60 29	Centaurus		4885	4·7	4·28	4·4	5	
554.	42·2	66 7	Musca	μ	4899	5·3	4·69	5·1	2	
555.	43·6	63 5	Centaurus	j	4903	4·9	4·62	4·6	4	
556.	44·0	69 32	Musca		4907	5·6	4·92	5·3	2	
557.	44·9	44 29	Centaurus	B	4910	5·0	4·59	4·65	5	Yellow.
558.	45·7	64 31	Musca		4920	5·5	5·11	5·0	1	
559.	46·0	56 18	Centaurus		4922	6·1	5·65	5·6	2	
560.	46·6	33 13	Hydra	β	4923	4·5	4·47	4·0	2	
561.	47·1	34 22	Hydra		4926	6·4	..	5·6	2	
562.	48·0	56 43	Centaurus		4931	6·7	..	5·75	2	
563.	51·9	55 37	Crux		4959	6·1	5·58	4·9	4	Var.?
564.	52·0	40 15	Centaurus		..	..	6·88	6·25	2	
565.	53·4	77 31	Chamæleon	ε	4974	4·9	5·06	5·1	2	
566.	56·1	84 57	Octans		4991	6·6	5·86	6·15	1	
567.	56·2	68 30	Musca		4985	6·5	6·10	5·65	2	
568.	56·7	62 37	Crux	θ^1	4990	4·7	4·47	4·5	6	
569.	57·2	41 44	Centaurus		4992	5·7	5·36	5·25	2	
570.	57·9	62 28	Crux	θ^2	4999	5·3	4·94	4·8	6	
571.	11 58·3	75 49	Chamæleon	κ	5004	5·6	4·93	5·35	2	
572.	12 0·4	63 55	Crux	η	5023	4·7	4·31	4·26	7	
573.	1·3	74 40	Musca		5028	5·8	5·11	4·85	2	
574.	1·8	48 0	Centaurus	E	5031	6·1	5·65	5·05	3	
575.	1·9	50 2	Centaurus	δ	5033	2·8	2·81	2·3	4	
576.	2·4	43 38	Centaurus		5036	6·2	6·03	5·7	2	
577.	3·6	34 0	Hydra		5043	6·4	..	5·8	2	
578.	5·1	51 40	Centaurus	ρ	5055	4·5	4·15	4·25	3	
579.	7·5	45 2	Centaurus	D	5069	5·8	5·36	5·7	4	
580.	8·5	58 3	Crux	δ	5075	3·4	3·08	2·96	11	White.
581.	10·8	67 16	Musca	ε	5084	4·7	4·15	4·5	3	Deep yellow.
582.	11·0	78 37	Chamæleon	β	5085	4·6	4·34	4·55	2	
583.	11·7	63 18	Crux	ζ	5090	4·6	4·25	4·1	7	
584.	12·3	54 27	Centaurus	F	5092	5·8	4·97	5·4	3	
585.	12 14·6	59 43	Crux	ε	5110	4·0	3·53	3·67	8	

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586.	12 15·2	66 50	Musca	ζ^2	5112	5·8	5·30	5·2	3	
587.	15·2	67 37	Musca	ζ^1	5113	6·5	..	5·85	3	
588.	15·8	85 27	Octans		5107	6·9	6·32	5·9	2	
589.	16·1	56 59	Crux		5120	6·3	..	5·5	2	
590.	17·0	34 43	Centaurus	x^1	5129	5·5	5·44	5·25	2	
591.	18·8	34 30	Centaurus	x^2	5142	5·8	5·84	5·35	2	
592.	19·7	62 24	Crux	a	5148	1·3	1·02	0·76	9	Yellowish wh.
593.	19·8	50 45	Centaurus	G	5150	5·7	5·07	4·9	3	
594.	20·2	48 13	Centaurus		5153	6·7	..	5·8	2	
595.	20·3	32 8	Hydra		5154	5·6	5·64	5·5	2	
596.	21·3	49 32	Centaurus	σ	5162	4·3	4·14	3·95	3	
597.	21·7	38 21	Centaurus	u	5164	5·9	5·71	5·45	3	[red.
598.	24·2	56 25	Crux	γ	5180	2·0	1·55	1·35	10	Deep orange-
599.	24·7	58 44	Crux		5185	6·4	..	5·73	4	
600.	25·0	71 26	Musca	γ	5184	4·0	4·01	3·8	2	
601.	27·9	43 58	Centaurus		5207	6·2	5·83	5·65	2	
602.	29·0	40 20	Centaurus		5211	5·7	5·48	5·25	4	
603.	29·7	68 27	Musca	a	5213	2·9	2·91	3·1	2	Yellow.
604.	30·9	47 51	Centaurus	r	5222	4·4	3·99	4·0	4	
605.	33·1	39 18	Centaurus	l	5231	5·2	4·71	4·9	4	
606.	34·5	68 43	Musca	R	5236	..	..	..	1	Var.
607.	34·5	45 28	Centaurus		5242	6·5	..	6·3	1	
608.	34·6	48 16	Centaurus	γ	5243	2·4	2·36	2·05	3	
609.	34·8	59 0	Crux		5241	6·0	5·04	5·35	4	
610.	35·7	48 8	Centaurus	w	5250	5·4	4·63	4·35	4	
611.	35·7	55 16	Crux		5249	6·5	6·16	5·85	3	
612.	36·1	55 29	Crux		5251	6·6	..	5·98	3	
613.	38·3	60 18	Crux	ι	5265	5·7	4·71	4·93	8	
614.	38·6	67 25	Musca	β	5267	3·4	3·26	3·2	2	Yellow.
615.	39·2	55 48	Crux		5273	5·4	4·93	4·85	3	
616.	40·4	59 0	Crux	β	5277	1·7	1·49	1·2	9	
617.	42·1	84 27	Octans	ι	5268	6·0	5·37	5·55	2	
618.	45·1	39 0	Centaurus		5300	6·6	..	5·9	2	
619.	46·0	48 16	Centaurus	e	5308	5·0	4·36	4·65	4	
620.	46·4	59 42	Crux	κ	5309	5·6	..	4·8	6	cum.
621.	46·5	39 30	Centaurus	n	5312	4·4	4·31	4·35	4	Yellowish ?
622.	47·2	58 28	Crux	λ	5316	5·6	4·84	4·8	6	
623.	47·3	56 30	Crux	μ	5317	4·1	..	3·95	3	
624.	48·3	42 14	Centaurus		5322	6·1	5·40	5·9	1	
625.	48·6	56 9	Crux		5321	6·0	5·62	5·45	2	
626.	49·9	50 31	Centaurus	H	5331	5·8	5·21	5·2	3	
627.	53·7	70 52	Musca	δ	5349	3·7	3·60	3·6	2	Pale yellow.
628.	56·3	48 51	Centaurus	ξ^1	5370	5·8	5·00	4·9	4	
629.	59·0	47 47	Centaurus	f	5390	5·3	4·94	4·9	4	
630.	59 6	49 14	Centaurus	ξ^2	5396	4·8	4·36	4·3	4	
631.	12 59·7	59 11	Centaurus		5392	6·7	..	5·95	3	
632.	13 0·1	64 38	Musca	θ	5394	5·9	5·64	5·4	3	
633.	4·3	42 42	Centaurus		5422	5·7	5·08	5·8	1	
634.	4·5	59 15	Centaurus		5418	5·4	4·74	4·85	3	
635.	13 4·6	65 34	Musca		5416	6·6	..	5·75	2	

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636.	13 5·1	37 8	Centaurus		5429	5·3	4·82	5·2	4	
637.	6·0	50 2	Centaurus		5435	6·4	5·99	5·7	2	
638.	6·5	58 26	Centaurus		5437	5·9	4·99	5·0	3	
639.	6·8	67 14	Musca	η	5433	5·3	4·91	4·75	3	
640.	8·8	66 7	Musca		5451	5·5	4·82	5·05	3	
641.	9·9	30 51	Centaurus	r	5466	5·7	5·16	5·5	2	
642.	13·6	36 3	Centaurus	ι	5491	3·0	2·98	2·95	4	
643.	14 6	60 20	Centaurus	J	5492	5·2	4·56	4·65	3	
644.	15·3	74 14	Musca	ι^1	5486	5·6	4·90	5·1	2	
645.	15·6	63 53	Centaurus	m	5500	5·2	4·43	5·15	1	
646.	16·8	69 58	Musca		5506	6·1	5·88	5·35	2	
647.	17·4	74 2	Musca	ι^2	5504	6·8	..	6·0	2	
648.	18·9	39 6	Centaurus		5531	5·9	5·12	5·4	4	
649.	21·1	85 9	Octans	κ	5482	5·7	5·68	5·4	2	
650.	21·8	50 31	Centaurus	K	5552	5·8	5·34	5·35	3	
651.	23·8	38 46	Centaurus	d	5569	4·5	3·95	4·4	2	
652.	29·3	69 48	Musca		5587	6·7	5·87	5·85	3	
653.	29·9	57 46	Centaurus		5596	7·0	..	5·3	1	
654.	32·0	52 50	Centaurus	ε	5618	2·6	2·58	2·5	5	White.
655.	33·7	58 9	Centaurus		5627	6·1	5·53	5·5	1	
656.	33·7	53 55	Centaurus	Q	5632	5·7	5·49	5·2	5	
657.	34·8	56 8	Centaurus		5640	6·5	..	5·4	1	
658.	38·6	32 25	Centaurus	i	5668	4·5	4·25	4·55	2	
659.	38·7	50 48	Centaurus	M	5664	5·2	4·61	4·9	3	
660.	39·7	35 37	Centaurus	z	5676	5·8	5·18	5·15	1	
661.	42·0	41 4	Centaurus	ν	5683	3·7	3·54	3·55	4	Var.?
662.	42·1	41 51	Centaurus	μ	5684	3·4	3·33	3·3	4	
663.	42·2	33 49	Centaurus	g	5688	4·6	4·28	4·55	2	
664.	44·0	52 11	Centaurus	N	5700	5·9	5·40	5·15	3	
665.	44·0	46 17	Centaurus		5702	6·2	5·85	6·05	1	
666.	44·6	32 22	Centaurus	k	5708	4·7	4·35	4·7	2	
667.	45·6	52 45	Centaurus		5711	6·5	6·05	5·55	2	
668.	46·0	31 18	Centaurus	h	5725	5·2	4·88	5·0	2	
669.	46·2	35 3	Centaurus	y	5726	6·0	5·72	5·7	2	
670.	47·1	51 33	Centaurus		5727	6·1	5·83	5·25	1	
671.	47·7	77 59	Apus		5694	6·5	..	5·6	2	
672.	47·7	46 40	Centaurus	ζ	5737	2·7	2·81	2·75	3	
673.	48·1	53 31	Centaurus		5741	6·6	..	5·6	1	
674.	48·3	54 5	Centaurus		5744	6·7	..	5·7	1	
675.	48·6	63 4	Centaurus		5733	5·7	4·76	5·4	3	
676.	50·7	41 29	Centaurus	φ	5768	4·1	4·04	4·0	4	
677.	51·0	44 11	Centaurus	ν^1	5770	4·2	4·05	3·9	3	
678.	53·2	76 11	Apus	θ	5757	var.	5 68	5·1	2	Var. ·
679.	53·9	45 0	Centaurus	ν^2	5782	5·0	4·50	4·2	3	
680.	55·0	59 46	Centaurus	β	5784	1·2	0·83	0·6	4	Bluish white.
681.	55·0	55 36	Centaurus		5786	6·6	..	5·8	2	
682.	57·4	54 4	Centaurus		5797	6·8	..	5·65	1	
683.	58·4	40 35	Centaurus	χ	5810	4·8	4·59	4·75	3	
684.	13 59·3	35 45	Centaurus	θ	5820	2·2	2·19	2·15	3	Yellowish wh.
685.	14 2·7	80 25	Apus	η	5792	5·3	5·04	5·0	2	

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686.	14 6·3	56 30	Centaurus		5850	5·6	5·22	5·3	3	
687.	7·1	83 5	Octans	δ	5802	4·7	4·10	4·5	2	Yellow.
688.	7·4	79 32	Apus	ε	5828	5·5	5·29	5·0	2	
689.	11·4	45 29	Lupus	ι	5881	3·8	3·91	3·55	4	Var. ?
690.	11·6	55 48	Centaurus	υ	5879	5·0	4·36	4·55	3	
691.	12·7	44 36	Lupus		5891	5·7	4·81	5·1	4	
692.	13·0	37 18	Centaurus	ψ	5895	4·4	4·19	4·65	3	Bluish white.
693.	13·7	57 53	Centaurus		5893	5·6	4·95	5·2	3	
694.	14·8	67 37	Circinus		5890	6·0	5·86	6·0	1	
695.	15·3	38 56	Centaurus	α	5911	4·9	4·61	5·05	3	
696.	18·1	44 39	Lupus	τ^1	5928	5·3	4·58	4·8	4	
697.	18·1	44 49	Lupus	τ^2	5927	4·9	4·35	4·6	4	
698.	20·9	67 9	Circinus		B. 4918	6·3	..	6·0	1	
699.	22·0	48 57	Lupus		5950	5·9	5·54	5·6	1	
700.	22·1	44 46	Lupus		5951	6·2	5·61	5·25	2	
701.	24·2	49 54	Lupus	σ	5964	5·2	4·61	4·5	3	
702.	26·2	41 33	Centaurus		5984	6·9	..	5·85	1	
703.	27·6	41 36	Centaurus	η	5993	2·5	2·54	2·7	3	
704.	27·6	40 58	Centaurus		5994	6·3	..	5·8	3	
705.	29·5	48 53	Lupus	ρ	6003	4·5	4·04	4·4	3	
706.	31·1	60 19	Centaurus	α	6014,7	0·7	0·20	−0·55	3	Yellow.
707.	32·4	64 26	Circinus	α	6012	3·5	3·37	3·65	2	White.
708.	32·4	78 31	Apus	α	5980	4·0	3·80	3·6	2	Deep yellow.
709.	33·6	46 51	Lupus	α	6034	2·6	2·46	2·4	3	
710.	34·2	37 15	Centaurus	b	6048	4·2	4·17	4·9	3	
711.	36·0	34 38	Centaurus	c^1	6063	4·3	3·76	4·3	3	Yellow.
712.	37·3	34 40	Centaurus	c^2	6071	5·4	4·96	5·1	3	
713.	38·1	46 55	Lupus		6073	6·3	..	5·75	1	
714.	38·2	66 4	Circinus		6059	6·1	6·00	5·5	2	
715.	38·3	51 51	Lupus	b	6070	5·8	5·12	5·7	3	
716.	40·1	82 43	Octans	π^1	B. 5022	6·0	5·60	5·45	2	
717.	43·2	82 32	Octans	π^2	B. 5046	5·9	5·52	5·5	2	
718.	43·5	43 3	Lupus	o	6114	5·0	4·43	4·7	4	
719.	43·7	76 9	Apus	R	6077	..	..	..	2	Var.
720.	44·1	65 29	Circinus	ζ	6106	6·5	6·13	5·7	3	
721.	44·3	84 17	Octans	ω	6006	5·9	5·80	5·25	1	
722.	45·0	37 17	Centaurus		6124	5·7	5·22	5·45	1	
723.	46·0	59 36	Circinus		6119	5·9	5·33	5·2	1	
724.	46·7	62 16	Circinus	θ	6122	5·8	5·19	5·3	3	
725.	47·4	52 18	Lupus	c	6132	6·0	5·57	5·6	3	
726.	48·1	33 21	Centaurus		6146	5·8	5·32	5·7	2	
727.	50·3	42 38	Lupus	β	6160	2·8	2·74	2 7	4	White.
728.	51·0	41 36	Centaurus	κ	6170	3·3	3·36	3·15	3	White.
729.	54·4	63 32	Circinus	η	6181	5·9	5·19	5·4	2	
730.	56·6	46 34	Lupus	π	6201	4·3	3·84	4·3	3	
731.	57·2	40 35	Lupus		6209	5·7	5·34	5·5	4	
732.	14 57·3	64 47	Circinus		6192	6·8	5·89	5·25	2	Var. ?
733.	15 0·4	44 48	Lupus	λ	6232	4·8	4·34	4·4	4	
734.	2·0	54 52	Lupus		6236	6·3	5·57	5·65	2	
735.	15 2·4	69 36	Triang. Aust.		6222	6·2	5·28	6·1	2	Var. ?

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736.	15 3·2	48 16	Lupus	κ	6246	4·1	4·17	3·95	3	
737.	3·3	51 37	Lupus	ζ	6245	3·6	3·46	3·35	3	
738.	4·4	44 2	Lupus	e	6257	5·5	4·97	5·1	4	
739.	6·9	60 29	Circinus	δ	6262	5·4	..	4·75	3	
740.	7·0	31 3	Lupus	i	6277	5·5	5·01	5·3	3	
741.	7·1	63 9	Circinus	ε	6260	5·5	4·85	5·1	2	
742.	7·3	68 13	Triang. Aust.	γ	6255	3·1	3·00	3·3	3	White.
743.	7·7	58 20	Circinus	β	6266	4·7	4·00	4·25	3	White.
744.	7·8	41 1	Lupus		6280	5·8	5·19	5·4	4	
745.	8·6	66 2	Triang. Aust.	R	6264	..	..	..	2	Var.
746.	9·8	47 25	Lupus	μ	6296	4·8	4·18	4·6	3	
747.	10·7	40 20	Lupus		6303	6·2	5·69	5·65	4	
748.	13·2	40 12	Lupus	δ	6326	3·7	3·37	3·45	4	
749.	13·4	47 51	Lupus	ν^2	6324	6·4	5·66	5·65	3	
750.	13·4	47 28	Lupus	ν^1	6322	5·8	4·98	5·15	3	
751.	13·4	58 52	Circinus	γ	6312	5·2	4·41	4·65	3	White.
752.	13·9	35 48	Lupus	ϕ^1	6335	3·6	3·28	3·75	4	Reddish yell.
753.	14·2	44 14	Lupus	ε	6333	3·7	3·56	3·6	4	
754.	14·5	67 52	Triang. Aust.		6308	6·5	..	6·05	2	
755.	15·2	36 24	Lupus	ϕ^2	6349	5·1	4·69	5·05	4	
756.	16·6	39 16	Lupus	υ	6356	5·9	5·33	5·55	5	
757.	16·7	64 5	Triang. Aust.		6336	6·3	..	5·1	2	
758.	17·0	37 43	Lupus		6359	7·0	..	6·25	3	
759.	17·2	38 17	Lupus	k	6361	5·1	4·63	5·0	5	
760.	17·9	72 57	Apus	κ^1	6323	5·8	5·61	5·3	2	
761.	25 3	65 54	Triang. Aust.	ε	6398	4·6	4·07	4·45	2	Or. yellow.
762.	26·5	73 2	Apus	κ^2	6390	5·9	5·76	5·3	2	
763.	26·6	75 40	Apus		6381	6·3	..	5·7	2	
764.	26·8	40 45	Lupus	γ	6422	3·2	2·96	2·85	4	
765.	27·3	44 32	Lupus	d	6424	5·1	4·76	5·0	4	
766.	29·5	51 57	Norma		6437	5·8	5·40	5·65	2	
767.	29·6	42 9	Lupus	ω	6443	4·7	4·04	4·9	4	Var.?
768.	31·8	34 0	Lupus	ψ^1	6463	5·1	4·44	4·95	4	
769.	32·6	44 15	Lupus	g	6464	5·2	4·51	5·0	4	
770.	34·5	37 1	Lupus	h	6486	5 8	5·22	5·65	4	
771.	34·7	34 18	Lupus	ψ^2	6489	5·1	4·75	4·85	4	
772.	38·8	34 17	Lupus		6514	5·8	5·65	5·45	5	
773.	40·6	52 49	Norma		6520	6·0	5·89	5·65	2	
774.	41·4	54 40	Norma		6524	6·1	5·70	5·6	2	
775.	43·0	33 15	Lupus	χ	6548	4·2	4·20	4·05	5	
776.	43·2	68 13	Triang. Aust.	κ	6518	5·7	5·31	5·2	2	
777.	44·1	63 2	Triang. Aust.	β	6533	3·1	3·09	3·25	3	Yellowish wh.
778.	47·5	64 40	Triang. Aust.		6559	6·1	5·86	5·5	2	
779.	48·4	31 25	Lupus		6587	6·7	..	6·3	1	
780.	48·9	33 36	Lupus	ξ	6592	5·2	5·08	4·85	4	
781.	50·2	53 40	Norma		6589	6·5	..	5·9	2	
782.	51·8	38 2	Lupus	η	6619	3·7	3·77	3·65	4	
783.	53·4	57 25	Norma	ι^1	6615	5·4	4·82	5·1	2	
784.	54·0	48 53	Norma	η	6632	5·2	4·66	5·2	3	
785.	15 55·1	38 15	Lupus		6644	5·6	5·10	5·3	4	

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786.	15 57·7	44 50	Norma	δ	6664	4·9	4·78	5·25	3	
787.	58·4	36 28	Lupus	θ	6678	4·9	4·42	4·55	4	
788.	15 59·0	57 36	Norma	ι^2	6665	6·0	5·84	5·6	2	
789.	16 1·7	78 22	Apus	δ^1	6623	4·6	4·73	4·35	2	
790.	1·9	78 22	Apus	δ^2	6628		5·19			
791.	3·4	55 13	Norma		6705	6·3	5·99	5·35	2	
792.	3·6	54 18	Norma	κ	6712	5·5	5·10	5·4	2	
793.	4·1	63 22	Triang. Aust.	δ	6701	4·3	4·04	3·85	2	Yellowish wh.
794.	5·5	57 35	Norma		6722	6·0	5·84	5·7	2	
795.	6·2	47 3	Norma	θ	6734	5·4	5·31	5·45	3	
796.	7·7	49 45	Norma	γ^1	6746	5·4	4·95	5·3	3	
797.	10·5	49 51	Norma	γ^2	6764	4·6	4·19	4·35	3	Yellow.
798.	10·6	42 22	Norma	λ	6772	5·7	5·64	5·65	3	
799.	14·3	78 37	Apus	γ	6727	3·9	3·94	3·85	2	Pale yellow.
800.	15·0	69 48	Triang. Aust.	ζ	6771	5·6	4·99	5·15	2	Yellowish wh.
801.	16·4	63 46	Triang. Aust.	ι	6795	5·8	5·26	5·4	2	Yellowish.
802.	18·0	47 16	Norma	ε	6825	4·8	4·67	5·05	3	
803.	19·7	61 21	Triang. Aust.		6824	5·8	5·11	5·7	2	Yellow.
804.	23·2	34 26	Scorpius	N	6859	4·6	4·46	4·55	3	
805.	23·7	65 14	Triang. Aust.	θ	6844	6·0	5·45	5·5	2	
806.	24·1	66 44	Triang. Aust.		6846	6·9	..	6·6	1	
807.	25·2	43 47	Norma	μ	6867	5·5	5·16	5·25	3	
808.	25·3	77 15	Apus	β	6817	4·5	4·22	4·2	2	
809.	27·8	60 44	Ara		6873	6·5	..	5·9	2	Dull white.
810.	28·1	35 0	Scorpius	H	6890	4·4	4·08	4·35	3	
811.	28·5	68 2	Triang. Aust.	η^1	6865	6·4	6·00	5·65	2	
812.	30·7	67 11	Triang. Aust.		6881	6·6	..	5·45	2	
813.	34·1	66 52	Triang. Aust.		6906	5·6	5·28	5·0	2	
814.	35·4	68 48	Triang. Aust.	α	6911	2·2	1·89	1·85	3	Deep yellow.
815.	36·0	40 36	Scorpius		6949?	5·9	5·68	5·7	2	
816.	39·0	58 49	Ara	η	6956	3·8	3·60	3·55	3	Yellow.
817.	42·1	34 4	Scorpius	ε	6996	2·3	2·29	2·3	3	Yellow.
818.	42·8	41 1	Scorpius		7000	5·9	5·48	5·45	2	
819.	43·4	37 50	Scorpius	μ^1	7006	3·6	3·26	3·15	3	White.
820.	43·9	37 48	Scorpius	μ^2	7009	3·9	3·74	3·45	3	White.
821.	45·2	42 9	Scorpius	ζ^1	7016	5·8	4·96	4·6	3	
822.	45·3	41 36	Scorpius		7017	5½	..	4·8	3	cum.
823.	45·8	42 9	Scorpius	ζ^2	7025	3·6	3·53	3·45	3	Deep or. yell.
824.	46·2	69 4	Triang. Aust.		6989	6·2	6·00	5·7	3	
825.	46·5	50 28	Ara		7024	6·9	..	5·9	2	
826.	48·3	55 47	Ara	ζ	7034	3·2	3·02	3·1	3	Yellow.
827.	48·7	50 26	Ara		7045	6·0	5·65	5·6	2	
828.	49·6	52 58	Ara	e^1	7050	4·2	4·17	4·25	4	Yellow.
829.	52·1	50 56	Ara		7067	7·0	..	5·8	2	
830.	53·2	53 3	Ara	e^2	7073	5·9	5·39	5·25	3	
831.	53·8	31 57	Scorpius		7089	5·7	5·15	5·3	2	
832.	56·6	33 57	Scorpius	k	7109	5·5	4·98	5·2	2	
833.	16 58·7	61 30	Ara		7102	6·7	..	6·25	2	
834.	17 0·5	67 2	Ara		7107	6·4	..	5·75	1	
835.	17 3·2	43 4	Scorpius	η	7155	3·6	3·37	3·65	3	

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836.	17 8·2	69 59	Apus	ι	7156	5·8	5·61	5·3	2	
837.	8·9	67 38	Apus	ζ	7162	5·4	4·70	4·85	2	
838.	8·9	32 31	Scorpius		7202	5·9	5·48	5·4	1	
839.	10·2	32 25	Scorpius		7216	6·9	..	5·7	1	
840.	10·3	44 5	Scorpius		7211	6·3	..	5·5	1	
841.	13·0	60 33	Ara		7214	6·3	..	5·9	2	
842.	13·9	47 20	Ara	ι	7236	5·8	5·44	5·25	2	
843.	14·9	56 15	Ara	γ	7233	3·6	3·42	3·4	4	Bluish white.
844.	14·9	55 24	Ara	β	7237	2·8	2·72	2·8	4	Deep yellow.
845.	15·2	44 2	Scorpius		7247	5·8	4·98	5·25	2	
846.	16·3	50 31	Ara	κ	7253	5·8	5·26	5·4	2	
847.	17·0	51 50	Ara		7256	6·9	..	5·8	2	
848.	17·5	50 31	Ara		7262	6·8	..	5·7	2	
849.	17·6	45 44	Ara		7267	5·7	5·34	5·3	2	
850.	18·0	52 11	Ara		7265	6·3	..	5·7	2	
851.	19·8	60 35	Ara	δ	7271	3·7	3·76	3·8	3	Yellowish wh.
852.	22·2	49 46	Ara	α	7301	2·9	2·86	3·05	4	White.
853.	22·3	37 12	Scorpius	υ	7313	3·2	2·84	2·95	3	White.
854.	24·4	59 43	Ara		7309	6·7	6·56	6·0	2	
855.	25·1	37 1	Scorpius	λ	7336	2·0	1·79	2·0	3	White.
856.	26·3	46 25	Ara	σ	7340	5·5	4·54	4·95	3	
857.	27·6	67 46	Apus		7316	7·0	..	F	2	
858.	27·8	54 25	Ara	π	7342	5·8	5·22	5·15	2	
859.	27·9	38 33	Scorpius	Q	7350	4·7	4·19	5·05	3	Var. ?
860.	28·3	42 55	Scorpius	θ	7351	2·1	1·99	2·05	4	Yellowish wh.
861.	29·3	72 9	Apus		7317	6·6	..	6·2	1	
862.	30·7	49 20	Ara	λ	7363	5·6	4·85	5·05	2	
863.	31·9	46 51	Ara		7374	6·3	..	5·55	2	
864.	33·5	64 40	Pavo	η	7364	3·8	3·51	3·7	1	
865.	33·8	38 58	Scorpius	κ	7393	2·6	2·59	2·7	3	
866.	34·2	51 46	Ara	μ	7385	5·7	5·33	5·15	2	
867.	34·4	36 53	Scorpius		7397	6·2	5·42	5·6	3	
868.	38·2	55 21	Ara		7413	6·4	..	5·6	2	
869.	38·8	40 4	Scorpius	ι^1	7425	3·3	3·10	3·15	3	Yellowish wh.
870.	40·3	53 34	Ara		7426	6·1	5·79	5·3	2	
871.	41·1	53 5	Ara		7428	6·7	..	5·5	2	
872.	41·3	37 0	Scorpius	G	7449	3·4	3·22	3·5	7	Yellowish.
873.	41·4	40 3	Scorpius	ι^2	7447	5·6	4·89	5·15	3	
874.	48·9	41 42	Scorpius		7497	5·3	4·71	5·3	4	
875.	55·5	64 33	Pavo		7523	6·7	..	6·75	1	
876.	56·5	63 40	Pavo	π	7527	4·6	4·39	4·75	1	
877.	56·9	50 6	Ara	θ	7535	3·9	3·84	3·9	3	
878.	58·8	62 1	Pavo	ι	B.6303	5·8	5·42	5·45	1	
879.	17 59·2	45 47	Ara		7558	6·8	..	5·8	2	
880.	18 0·0	70 46	Pavo		G.1721	6·6	..	6·5	1	
881.	1·6	47 32	Telescopium		7578	6·6	..	5·95	2	
882.	1·9	45 58	Telescopium	ε	7581	5·2	4·54	5·1	2	
883.	2·2	63 43	Pavo		7561	6·9	..	6·95	1	
884.	3·8	63 5	Pavo		7577	6·0	5·62	5·75	1	
885.	18 7·6	63 55	Pavo		7601	6·4	..	6·15	1	

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886.	18 9·2	36 48	Sagittarius	η	7643	3·3	2·96	3·35	3	
887.	11·7	61 33	Pavo	ξ	7638	4·4	4·15	4·5	1	
888.	11·7	60 48	Pavo		7641	6·9	..	6·7	1	
889.	15·5	89 17	Octans	σ	6295	5·8	5·47	5·4	3	
890.	15·9	34 26	Sagittarius	ε	7689	2·2	1·93	2·25	3	White.
891.	17·7	46 2	Telescopium	α	7694	3·5	3·69	3·7	4	
892.	19·0	71 51	Pavo		7666	7·0	..	7·2	1	
893.	19·2	49 8	Telescopium	ζ	7702	4·5	4·00	4·55	3	
894.	19·7	62 21	Pavo	ν	7691	4·8	4·85	4·7	1	
895.	20·5	47 18	Telescopium		7713	6·5	..	5·6	4	
896.	22·2	42 0	Corona Aust.		7731	6·3	..	6·0	2	
897.	22·5	46 0	Telescopium	δ^1	7729	5·7	5·06	4·95	3	
898.	22·8	45 50	Telescopium	δ^2	7734	5·7	5·30	5·1	3	
899.	22·9	33 4	Sagittarius		7746	5·8	5·51	5·65	3	
900.	24·6	42 24	Corona Aust.	θ	7756	5·1	4·41	5·1	3	
901.	24·8	38 49	Corona Aust.	κ	7758	5·4	5·71	5·45	2	
902.	25·8	33 6	Sagittarius		7761	5·6	5·38	5·4	3	
903.	28·4	71 32	Pavo	ζ	7736	4·2	4·04	4·5	1	Yellow.
904.	31·4	64 40	Pavo		7773	6·2	5·83	6·1	1	
905.	33·2	64 59	Pavo		7785	5·3	4·76	5·1	1	
906.	35·2	38 26	Corona Aust.	λ	7827	5·4	5·18	5·3	2	
907.	35·9	35 46	Sagittarius		7830	5·2	4·91	5·25	3	
908.	36·3	65 12	Pavo	θ	7813	6·1	5·93	5·9	1	
909.	39·8	43 49	Corona Aust.	η^1	7852	5·7	5·69	5·5	3	
910.	40·6	43 34	Corona Aust.	η^2	7859	6·0	5·79	5·5	3	
911.	40·6	62 20	Pavo	λ	7841	4·3	4·35	4·45	1	
912.	42·7	52 15	Telescopium	κ	7867	5·7	5·19	5·6	2	
913.	44·0	67 23	Pavo	κ	7856	..	..	..	1	Var.
914.	44·9	50 2	Telescopium		7888	6·8	6·49	5·8	2	
915.	45·2	72 5	Pavo		7848	6·9	..	6·7	1	
916.	45·4	70 37	Pavo		7857	6·7	..	6·9	1	
917.	46·4	64 10	Pavo		7879	..	..	F	1	
918.	47·3	66 49	Pavo		7880	6·5	..	6·0	1	
919.	47·5	60 22	Pavo	ω	7895	5·4	5·07	5·55	1	
920.	48·4	53 6	Telescopium	λ	7910	5·2	4·86	5·1	2	
921.	50·1	68 55	Pavo		7897	6·1	5·94	6·0	1	
922.	54·3	42 16	Corona Aust.	ζ	7958	5·2	4·76	5·0	3	
923.	55·6	71 44	Pavo		7928	7·0	..	6·9	1	
924.	56·4	52 31	Telescopium	ρ	7963	5·7	5·04	5·1	2	
925.	56·6	68 37	Pavo		7944	5·7	5·24	5·5	1	
926.	58·0	37 14	Corona Aust.	γ	7988	4·6	4·28	4·65	4	Yellowish wh.
927.	18 59·6	40 41	Corona Aust.	δ	7992	5·0	4·41	4·8	3	
928.	19 1·0	38 6	Corona Aust.	α	8002	4·2	4·22	4·6	3	White.
929.	1·4	39 32	Corona Aust.	β	8007	4·1	3·99	4·55	3	
930.	3·0	69 24	Pavo	τ	7986	6·6	..	6·15	1	
931.	7·2	45 41	Telescopium		8037	5·9	5·28	5·55	2	
932.	11·0	68 36	Pavo		8034	6·7	..	6·65	1	
933.	13·6	44 41	Sagittarius	β^1	8075	3·8	4·10	4·0	3	
934.	14·2	45 2	Sagittarius	β^2	8079	4·4	4·35	4·1	3	
935.	19 15·2	40 51	Sagittarius	α	8087	4·0	4·13	4·2	3	

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936.	19 18·2	68 41	Pavo		8078	6·5	..	6·65	1	
937.	24·3	45 32	Telescopium		8129	6·0	5·72	5·5	2	
938.	25·9	48 22	Telescopium	ι	8137	5·4	4·95	5·1	1	
939.	32·8	81 39	Octans		8094	6·9	6·32	6·15	1	
940.	35·0	72 48	Pavo		8156	5·7	5·49	5·35	1	
941.	38·0	32 12	Sagittarius		8211	5·7	5·71	5·65	1	
942.	43·3	40 11	Sagittarius		8239	5·6	5·38	5·45	3	
943.	46·1	73 14	Pavo	ε	8219	4·0	4·04	4·45	1	White.
944.	46·6	42 12	Sagittarius	ι	8255	4·3	4·08	4·4	3	
945.	48·2	67 16	Pavo	μ^1	8244	5·9	5·70	5·2	1	Dull white.
946.	49·7	67 17	Pavo	μ^2	8251	5·6	5·20	5·0	1	Yellowish wh.
947.	51·2	59 43	Pavo		8269	5·7	4·87	5·2	1	
948.	51·6	35 37	Sagittarius	θ^1	8291	4·5	4·68	4·65	2	
949.	51·7	35 2	Sagittarius	θ^2	8292	5·8	5·38	5·55	2	
950.	52·9	41 9	Sagittarius		8297	6·6	..	5·8	1	
951.	55·2	38 17	Sagittarius		8310	5·0	4·68	5·25	2	
952.	56·4	32 24	Sagittarius		8322	5·4	5·01	5·35	1	
953.	19 56·4	66 30	Pavo	δ	8295	3·5	3·56	3·4	2	Yellowish wh.
954.	20 12·3	81 22	Octans		8331	6·3	5·75	5·85	1	
955.	15·7	57 8	Pavo	α	8416	2·1	2·05	2·2	2	Bluish white.
956.	17·0	81 42	Octans		8360	6·5	5·67	6·15	1	
957.	25·2	61 0	Pavo	ϕ^1	8461	4·9	4·73	4·75	1	White.
958.	25·3	44 56	Microscopium	ν	8472	5·6	5·12	4·95	2	
959.	26·5	76 37	Octans	μ^1	8435	6·3	6·12	6·0	2	
960.	26·8	75 46	Octans	μ^2	8443	6·2	6·45	5·85	2	
961.	27·1	61 57	Pavo	ρ	8470	4·9	5·02	4·85	1	
962.	28·8	47 43	Indus	α	8494	3·1	3·20	3·3	3	Yellow.
963.	29·7	60 58	Pavo	φ^2	8490	5·5	5·24	4·95	1	Yellowish wh.
964.	30·4	67 12	Pavo	υ	8488	5·6	5·32	5·2	1	White.
965.	33·7	66 39	Pavo	β	8500	3·3	3·54	3·3	2	Yellowish wh.
966.	34·8	52 22	Indus	η	8524	4·7	4·73	4·75	1	
967.	37·4	69 14	Pavo	σ	8521	5·7	5·52	5·25	1	Yellowish wh.
968.	40·0	44 26	Microscopium	ι	8554	5·4	5·18	4·85	2	
969.	40·9	46 41	Indus	ζ	8564	5·3	4·90	4·85	2	
970.	41·2	62 53	Pavo		8550	5·9	5·84	5·55	1	
971.	42·1	34 14	Microscopium	α	8579	5·1	4·98	4·95	3	
972.	42·4	52 4	Indus	ι	8567	5·6	5·10	4·8	1	
973.	44·2	33 39	Microscopium	β	8593	6·2	6·20	5·6	3	
974.	45·0	58 55	Indus	β	8584	3·7	3·66	3·65	2	Yellow.
975.	49·5	77 30	Octans	α	8570	5·6	5·31	5·1	2	
976.	53·6	32 45	Microscopium	γ	8639	5·0	4·75	5·05	3	
977.	54·3	76 42	Octans		8615	6·8	..	6·25	1	
978.	55·0	39 7	Microscopium	ζ	8653	5·5	5·51	5·0	2	
979.	58·1	64 26	Pavo		8654	6·2	5·78	6·05	1	
980.	58·3	41 53	Microscopium	η	8675	5·9	5·55	5·35	2	
981.	58·5	30 37	Microscopium	δ	8683	6·0	5·59	5·6	3	
982.	20 58·8	32 50	Microscopium		8685	5·7	5·15	5·35	3	
983.	21 1·6	70 38	Pavo	ο	8668	5·5	5·04	5·25	1	Yellowish wh.
984.	4·6	75 52	Octans		8671	6·7	..	6·05	1	
985	21 7·6	65 12	Pavo		8721	6·7	6·26	6·2	1	

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986.	21 10·3	32 42	Microscopium	ε	..	4·9	4·84	4·9	3	
987.	12·8	41 20	Microscopium	θ^1	8773	4·8	5·01	4·9	2	
988.	13·5	83 11	Octans		8672	6·7	6·47	6·0	1	
989.	16·1	65 56	Pavo	γ	8778	4·5	4·17	4·5	2	Yellowish wh.
990.	16·4	41 32	Microscopium	θ^2	8793	6·1	5·87	5·35	2	
991.	16·7	80 35	Octans		8732	6·5	6·70	5·85	1	
992.	19·0	43 5	Microscopium		8809 ?	5·9	5·56	6·4	1	
993.	21·6	31 47	Piscis Aust.		8825	6·5	..	6·4	2	
994.	23·2	80 0	Octans		8783	6·5	..	5·85	1	
995.	24·2	41 44	Grus	ξ	8833	5·7	5·36	5·35	2	
996.	24·7	34 30	Piscis Aust.		8837	6·1	6·22	5·55	2	Var. ?
997.	27·5	77 55	Octans	ν	8817,8	3·8	3·73	3·9	2	Yellowish wh.
998.	29·3	33 36	Piscis Aust.		8855	6·2	6·11	5·7	2	
999.	31·5	83 17	Octans	λ	8798	5·7	5·41	5·15	2	
1000.	37·5	33 36	Piscis Aust.	ι	8901	4·4	4·41	4·4	3	
1001.	40·4	31 28	Piscis Aust.	θ	8917	5·2	5·25	4·65	3	
1002.	46·3	37 57	Grus	γ	8951	3·0	3·20	3·3	4	
1003.	48·7	78 15	Octans		8927	6·6	..	6·0	2	
1004.	48·8	37 51	Grus		8964	5·8	5·67	5·25	3	
1005.	50·7	76 43	Octans		8946	6·2	5·93	5·65	1	
1006.	56·0	30 30	Piscis Aust.		9004	7·2	..	6·4	2	
1007.	58·6	40 9	Grus	λ	9017	4·7	4·52	4·4	3	
1008.	21 58·8	76 29	Octans		8991	6·5	..	5·85	1	
1009.	22 0·3	47 34	Grus	α	9021	1·9	1·92	1·75	4	
1010.	1·1	33 36	Piscis Aust.	μ	9029	4·7	4·64	4·35	3	
1011.	2·8	33 10	Piscis Aust.	τ	9037	5·3	4·95	4·65	3	
1012.	5·6	78 8	Octans	ψ	9022	5·9	5·63	5·45	2	
1013.	5·9	81 4	Octans	ε	9010	5·6	5·16	5·0	2	
1014.	7·0	41 58	Grus		9061	6·8	..	5·25	2	
1015.	7·1	86 36	Octans	υ	8924	6·4	5·69	5·6	2	
1016.	8·1	41 58	Grus	μ^1	9069	5·0	4·86	4·65	3	
1017.	8·9	42 15	Grus	μ^2	9075	5·4	5·16	4·75	3	
1018.	9·9	60 53	Tucana	α	9074	2·8	2·90	2·4	1	Golden yellow.
1019.	15·1	46 35	Grus	π^1	9107	6·7	..	4·85	3	Var.
1020.	15·4	46 33	Grus	π^2	9108	5·9	5·81			
1021.	21·8	44 8	Grus	δ^1	9138	4·2	4·07	3·95	3	
1022.	22·3	44 23	Grus	δ^2	9140	4·4	4·26	3·95	3	
1023.	23·4	79 25	Octans		9122	6·6	..	6·0	2	
1024.	24·4	32 59	Piscis Aust.	β	B. 7176	4·4	4·48	4·2	7	
1025.	27·8	52 15	Grus		9173	6·8	..	6·8	1	
1026.	29·2	41 14	Grus		9181	6·4	6·12	5·25	2	
1027.	29·5	32 18	Piscis Aust.		9184	6·1	5·48	5·6	4	
1028.	29·7	41 14	Grus		9183	6·0	5·65	5·25	2	
1029.	31·4	53 20	Grus		9189	6·7	..	6·4	1	
1030.	33·1	82 2	Octans	β	9165	4·4	4·35	4·25	2	Yellowish wh.
1031.	33·4	31 18	Piscis Aust.		9205	6·3	..	5·85	3	
1032.	35·2	47 51	Grus		9210	6·5	..	6·35	1	
1033.	35·2	47 32	Grus	β	9211	2·2	2·09	2·3	4	Deep yellow.
1034.	35·4	30 1	Piscis Aust.		F. 19	6·5	6·24	6·2	2	
1035.	22 36·2	42 4	Grus	ρ	9218	5·2	4·83	4·95	3	

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1036.	22 37·9	54 9	Grus	η	9223	5·1	4·87	4·8	1	
1037.	38·3	47 12	Grus		9229	5·9	5·33	5·8	1	
1038.	38·6	80 47	Octans	ξ	9202	5·7	5·47	5·1	2	
1039.	38·6	49 38	Grus		9231	6·7	..	6·35	1	
1040.	39·2	77 43	Octans		9216	6·7	..	6·05	1	
1041.	39·3	47 36	Grus		9237	6·9	..	6·4	1	
1042.	41·0	51 58	Grus	ε	9249	3·5	3·69	3·35	2	
1043.	44·4	30 12	Piscis Aust.		9281	6·4	6·17	5·7	2	
1044.	45·6	33 32	Piscis Aust.	γ	9287	4·6	4·63	4·37	16	
1045.	49·0	33 12	Piscis Aust.	δ	9304	4·4	4·08	4·23	16	
1046.	50·7	30 17	Piscis Aust.	α	9314	1·4	1·27	1·4	1	
1047.	51·6	36 11	Piscis Aust.		9316	6·4	..	6·05	2	
1048.	53·5	53 25	Grus	ζ	9322	4·0	4·13	4·1	1	
1049.	53·8	51 37	Grus		9328	5·9	5·58	5·7	1	
1050.	56·6	35 25	Piscis Aust.	π	9350	5·3	5·05	5·1	2	
1051.	58·1	80 9	Octans		9332	6·3	6·10	6·25	1	
1052.	22 59·8	44 12	Grus	θ	9366	4·2	4·40	4·2	3	
1053.	23 1·6	81 35	Octans		9355	7·0	6·49	6·3	2	
1054.	3·3	45 55	Grus	ι	9382	3·9	4·06	4·05	3	
1055.	8·3	88 10	Octans	τ	9225	6·0	5·58	5·45	2	
1056.	9·6	80 9	Octans		9399	6·6	6·20	6·45	1	
1057.	11·2	41 30	Grus	φ	9432	5·8	5·48	5·25	3	
1058.	12·1	33 13	Sculptor	γ	9435	4·4	4·34	4·6	1	
1059.	25·2	78 4	Octans		9494	6·1	5·77	5·45	2	
1060.	26·3	38 30	Sculptor	β	9513	4·8	4·58	4·3	2	
1061.	28·1	65 23	Tucana		9518	..	..	5·85	1	
1062.	28·3	43 18	Phœnix	ι	9523	4·4	4·87	4·45	1	
1063.	30·6	77 33	Octans		9525	6·4	..	5·7	2	
1064.	31·1	46 11	Phœnix		9535	4·5	4·92	4·7	1	
1065.	34·1	32 46	Sculptor	μ	9552	5·5	5·32	4·9	1	
1066.	37·0	79 29	Octans		9560	6·1	5·55	5·85	2	
1067.	37·2	71 11	Tucana		9566	6·4	5·96	5·4	1	
1068.	37·3	65 6	Tucana		9571	6 0	5·54	4·9	1	
1069.	40·5	69 5	Tucana		9588	7·0	..	6·0	1	
1070.	40·6	50 55	Phœnix	σ	9591	5·2	5·35	4·9	1	
1071.	44·7	82 43	Octans	γ^1	9607	5·5	5·12	4·85	2	
1072.	50·6	82 52	Octans	γ^2	9651	6·1	5·61	5·45	2	
1073.	50·8	63 39	Tucana		9658	6·2	5·96	4·85	1	
1074.	51·0	64 59	Tucana	η	9661	5·3	5·12	4·45	2	
1075.	53·0	30 11	Sculptor		9675	5·8	5·62	5·85	1	
1076.	53·4	66 16	Tucana	ε	9678	4·3	5·64	3·85	2	
1077.	54·6	49 30	Phœnix	τ	9689	5·8	5·58	5·3	3	
1078.	54·9	51 2	Phœnix		9694	5·6	5·28	5·2	2	
1079.	55·1	77 45	Octans	θ	9691	5·4	4·62	4·85	3	Yellowish wh.
1080.	55·9	30 25	Sculptor	ζ	9700	5·2	4·93	4·65	1	
1081.	58·3	72 8	Tucana		9710	5·9	5·56	5·05	2	
1082.	58·4	73 35	Tucana		9708	..	..	6·25	2	
1083.	23 59·8	49 46	Phœnix		9721	5·7	5·60	5·0	1	

NOTES.

10. Nov. 3, 6·05; Nov. 10, 5·75. Not seen on Oct. 25, but moon nearly full.

13. The great cluster Bode 47; N.G.C. 104. Estimated mag. in S.M.P. 4·0; in U.A. 4½. The appearance in the opera-glass was that of a very large, hazy-looking star, falling off at the edges.

14. According to Gould β Hydri is remarkable for its clear yellow light. The color was twice estimated on Feb. 17 with 2¾-in. refr., once as pale yellow and once as white.

17. The H.P. mag. is 4·78.

18, 19. The three stars λ^1 Phœnicis, λ^2 Phœnicis and L. 110 form a triangle, and the observations of the first and last are so discordant as to suggest that both may be variable. The following are the observations of these three stars:—

	λ^1.	λ^2.	L. 110.
	M.	M.	M.
Oct. 15	4·3	5·5	5·7
Nov. 3	5·0	5·4	5·1
" 11	4·6	5·1	5·4
" 24	4·3	5·1	5·1
Dec. 10	4·7	5·55	5·4
" 23	4·2	5·3	5·2
" 29	4·6	5·3	5·1
Jan. 4	4·1	5·3	4·85

It is noteworthy that λ^1 and L. 110, especially the latter, seem to have increased in brightness continually, on the whole, in the course of the observations, whilst λ^2 remained stationary. It is possible that the two latter stars may have been observed together on some nights, and hence the change in relative position of the two stars may have had some influence on the results, but this would not apply to λ^1. The difference in brightness between λ^1 and λ^2 was only 0·1 mag. on Nov. 3, whereas on Oct. 15 it amounted to 1·4 mag., and on Nov. 24 to 0·8 mag. B. made the mags. of λ^1 and L. 110, 5 and 5⅔ respectively; H. 6 and 6½.

21. Estimation difficult owing to proximity to β Tucanæ.

22. The observation was made on Mar. 1. Not visible in the opera-glass on Feb. 28.

23. Feb. 28, 5·55; Mar. 1, 5·3. B. made it 6; H. 4½.

24. See 18.

28, 29. Both stars were observed 5·2 on Oct. 14 and 5·9 on Oct. 15. They were considered equally bright on both nights.

36. Feb. 28, 5·55; Mar. 1, 5·25. B. made it 6; H. 6½, the same as λ^2 Tucanæ. B. also makes λ^1 only ⅓ mag. fainter than λ^2, but the S.M.P. measures make the former 1·2 mag. fainter than the latter. The S.M.P. measures of λ^1 moreover are not accordant. Variability seems highly probable.

41. Oct. 14, 3·5; Oct. 15, 3·4; Oct. 25, 3·3; Nov. 3, 3·2; Nov. 11, 3·5.

48. Oct. 14, 5·5; Oct. 15, 4·8; Nov. 3, 5·2; Nov. 11, 5·0.

51. Combined with L. 449, 7·2 mag. in U.A.

52. Nov. 3, 0·15; Nov. 24, 0·75; Dec. 11, 0·55; Feb. 14, 0·8; Feb. 17, 0·75; Feb. 21, 0·55; Feb. 28, 0·65; Mar. 1, 0·55; Mar. 2, 0·25; Mar. 7, 0·3. *Achernar* is strangely included as a "red star" in Birmingham's Catalogue of Red Stars (No. 28), and also in Chambers' Catalogue of Red Stars published in *Monthly Notices*, Vol. 47, p. 348. Gould, however, remarks that "Achernar is at present a white star without apparent tinge of any sort." On Feb. 9 the color was noted as "flushed white" with a 2¾-in. refr., but the star's altitude was low. On Feb. 28 it was described as "silvery white" in the opera-glass. The error seems to have originated in an observation of Engelmann's made when the star was near the horizon.

54. Nov. 3, 4·8; Mar. 1, 4·45. On Feb. 9 the prec. component of this fine double star was estimated 0·1 mag. brighter than the foll. one, with p. 75 on a 2¾-in. refr.; the colors of both being yellow and of about equal intensity.

56. Nov. 3, 4·95; Mar. 1, 4·75.

58. Nov. 3, 4·75; Mar. 1, 4·55.

63. Not visible in the opera-glass on Feb. 14 and 17, but moon nearly full on both nights. Observations by Mr. R. T. A. Innes in 1896 range from 6·3 to 7·0 (*Journal* B. A. A. vi. 489).

66. Nov. 3, 5·3; Mar. 1, 5·55.

73. The S.M.P. measures are rather discordant. ϕ Eridani is remarkable for its blue color according to Gould.

81. The observation was made on Mar. 1.

88. Nov. 3, 6·1; Mar. 1, 5·5.

93. Nov. 3, 6·8; Mar. 1, 6·1.

97. The H.P. mag. is 4·71; Argelander and Heis both made it 4⅔.

98, 99. The observations were made on Oct. 14. One of these stars is perhaps variable. B. made them both 5⅔. In the U.A. there is a difference of 0·7 mag., and in S.M.P. of 0·4 mag., whilst in 1885 the two stars were again nearly exactly equal.

100. The obs. was made on Oct. 14, but on Nov. 3 the star was invisible in the opera-glass, although the night was fine and clear and without cloud or moon. B. gives the mag. as 5⅔.

102. Oct. 14, 3·75; Nov. 3, 3·3; Mar. 1, 3·2. θ Eridani is a double star, and Gould in discussing the Cordoba results (which are discordant) and other observations concludes that "one of the stars probably varies to some extent." It is noteworthy that the S.M.P. measures are also discordant. Herschel in his Cape Observations gives the provisional magnitude from his sequences as 3·73, which would appear to correspond to about 3·3 on the scale of the U.A.

107. The color was observed with the 2¾-in. refr. The star is marked "*r*" in the U.A.

112. Oct. 14, 5·4; Nov. 3, 6·0; Mar. 1, 5·6. The mag. is strangely given as 4 by H. in his Atlas, the same as e Eridani. B. made it 6.

116. Jan. 4, 6·3; Feb. 28, 6·1 (rough est. owing to cloud); invisible in the opera-glass on Feb. 17, but the moon was then nearly full. The Cordoba estimates varied, according to Gould, from 6·7 to 7·2.

B. and H. both made it 6. In the latter's Atlas the star is wrongly numbered 274 of Lacaille's Catalogue, instead of 278.

117 The H.P. mag. is 4·77.

120. The observation was made on Oct. 14. ρ Fornacis was suspected variable by Gould. In H.P. it is 5·70 mag. Argelander and Heis both made it 5.

121. Oct. 14, 3·9; Nov. 3, 4·4. Suspected var. by Gould.

122. Oct. 14, 4·0; Nov. 3, 4·0.

123. The observation was made on Nov. 3. Invisible in the opera-glass on Oct. 14, though the night was clear and without cloud or moon. B. made it 6 mag.

132. Observation made on Mar. 1. S.M.P. measures rather discordant.

135. Oct. 14, 3·6; Nov. 3, 3·6; Mar. 22, 3·0. The S.M.P. measures are also rather discordant.

139. Jan. 4, 5·55; Feb. 17, 5·8. Suspected variable by Gould. Roberts also found traces of variation in 1891, the star "being noted sometimes brighter and sometimes fainter than L. 1425." On Dec. 30, 1891, it was noted by the last-named observer as brighter than L. 1523, or 5·9 mag. (on the scale of the U.A.).

140. Oct. 14, 6·3; Nov. 3, 6·35; Mar. 22, 5·5 (alt. low and night exceedingly clear).

141. Oct. 14, 3·6; Nov. 3, 4·0; Mar. 22, 3·3 (alt. low and night exceedingly clear). The H.P. mag. is 4·03.

142. Oct. 14, 6·4; Nov. 3, 6·25; Mar. 22, 5·7 (alt. low and night exceedingly clear).

144. Nov. 3, 6·7; Mar. 1, 6·0.

148. The observation was made on Nov. 3. Invisible on Oct. 14, though night clear and without cloud or moon. B. made it 6 mag.

150. Oct. 14, 5·6; Nov. 3, 6·0; Mar. 22, 5·4.

153. Nov. 3, 4·5; Mar. 1, 5·05. H. made it 4½; B. 5⅓.

154. Gould remarks that "our estimates range from 4·3 to 5·0, and strongly suggest variability. The magnitude is given as 6 by Piazzi and Taylor; 4 by Argelander, Heis, and Behrmann; it was 4½ in Lacaille's zone, and 5 in his catalogue. Argelander's estimates (B. B. vi. 340) vary from 4·5 to 5·5." H. made the mag. 4·5. The S.M.P. results are rather discordant. The H.P. mag. is 4·43. The observations of 1885 are, Oct. 14, 4·2; Nov. 3, 4·5. The different determinations of the mag. of the adjacent star υ^2 Eridani are remarkably accordant. υ^1 was compared with υ^2 on two occasions by W. Herschel (*Phil. Trans.* 1796, p. 470). If we assume with E. C. Pickering (*Observatory*, 1884, p. 256), that the values of the intervals employed by Herschel are 0·1 mag. for a period and 0·2 mag. for a comma, and that the mag. of υ^2 is 3·8, then these observations would give 3·7 and 4·0 respectively for the magnitude of υ^1. But the altitudes of these two stars are so low in England, even when on the meridian, that atmospheric absorption must have affected υ^2 perceptibly more than υ^1, although the S. decl. of the former is only 48′ greater than that of the latter. The difference from this cause in fact could hardly be less than 0·2 mag., and applying this correction, the final values for Herschel's observations are 3·9 and 4·2. Variability, although not certain, seems very probable, and the star deserves systematic observation for variation.

155. The H.P. mag. is 3·80.

157. Feb. 21, 5·25; Feb. 27, 5·3. B. gives the mag. as 6; H. as 6·5.

158. The var. R Doradus, Ch. 1654. The obs. was made on Jan. 4.

160. B. made it 6 mag.

161. B. rather curiously makes β Cœli brighter (4⅔) than α Cœli (5). All the other authorities agree in reversing this order.

163. Nov. 3, 6·7; Mar. 1, 6·05; Mar. 22, 5·8. 6 mag. in B.

171. Feb. 21, 5·2; Feb. 27, 5·8. The observations quoted in the U.A. are discordant.

174. The variability of this star appears certain. Gould remarks that it "was designated by Lacaille as γ^2 Cœli; and its magnitude noted in his zone as 5, and in his catalogue as 6. Piazzi gives it as 7; Taylor as 6½; Maclear as 5½; and Behrmann as 6. At Cordoba it has never been seen to reach the brightness 7·0, but has been variously estimated from 7·1 to 7·3." The observations of 1885–6 are, Nov. 3, 5·25; Dec. 11, 5·9; Mar. 22, 5·7; the mean of these three observations being 5·6, or 1·5 mag. brighter than the value given in the U.A. The night of Nov. 3 was fine and clear, without cloud, and L. 1713 was estimated 0·35 mag. brighter than B.A.C. 1152 (5·6 H.P.) and only 0·45 mag. fainter than [illegible] Eridani (4·8 H.P.).

178. This is μ Doradus of Lacaille. It was just glimpsed at times on Dec. 31, but see note by Gould in the U.A. p. 263. The observation probably refers to the combined light of several faint stars.

180. Nov. 3, 7·0; Dec. 11, 5·75. Unless the last observation is in error the star is certainly variable. There was misty cloud about in the early part of the night, and this may have affected the result. The neighbouring star L. 1773 was observed on both nights, almost at the same time, the mags. being 6·0 and 6·1 respectively.

182. Nov. 3, 5·6; Dec. 11, 4·9; Mar. 17, 4·8.

185. An obs. of Feb. 21, 4·85 mag., marked "affected by haze?" has been given ½ weight.

188. Nov. 3, 7·1; Dec. 11, 6·0; Mar. 22, 6·2.

189. Nov. 24, 6·15; Feb. 21, 5·6; Mar. 13, 5·4. B. made it 6, H. 6·5.

190. Nov. 24, 5·75; Feb. 21, 5·1; Mar. 13, 5·25. The obs. of Feb. 21 is marked "affected by haze?" B. made the mag. 5⅔, H. 6. The different estimations relate to the combined light of θ Pictoris and B. 961. The S.M.P. measures probably relate to θ alone.

195. Nov. 3, 6·45; Dec. 11, 5·8. The star was suspected of variability by Gould (U.A. p. 292). The S.M.P. mag. is the result of accordant measures on two nights.

197. Nov. 3, 6·95; Dec. 11, 6·1.

199. Marked "*r*" in U.A. The color was noted as white on Feb. 27 with 2¾-in. refractor.

201. Nov. 3, 6·3; Dec. 11, 5·8; Mar. 22, 5·7.

202. Nov. 3, 2·35; Dec. 10, 2·6; Mar. 17, 2·5. The U.A. and also the S.M.P. observations are rather discordant. The H.P. mag. is 2·72.

203. Nov. 3, 5·9; Dec. 10, 5·1. The latter is marked "affected by mist?"

207. Feb. 21, 6·3; Feb. 27, 5·5.

208. Nov. 3, 7·1; Dec. 10, 6·5; Mar. 22, 6·3. The star is not in U.A., S.M.P., B., or H. Possibly variable.

213. Nov. 24, 3·7; Feb. 21, 4·1.

214. Nov. 3, 7·0; Mar. 22, 6·4 (just visible).

216. The H.P. mag. is 2·93.

217. Feb. 21, 5·1; Feb. 27, 5·4. Suspected slightly var. by Gould.

219. Nov. 3, 6·8; Dec. 11, 6·2. B. made it 6 mag.

221. Nov. 3, 6·0; Dec. 11, 5·6; Mar. 17, 5·35.

224. Nov. 24, 6·0; Feb. 21, 5·9. Suspected var. by Gould.

226. Identification doubtful.

227. Nov. 3, 6·3; Dec. 11, 5·85. Possibly var.

231. The H.P. mag. is 4·08.

232. Dec. 31, 4·75; Feb. 17, 4·85. B. made it 5 mag. In H.'s Atlas it is 6 mag.

233. The observation was made on Dec. 31. Identification a little doubtful.

238. The observations refer to the combined light of L. 2137 and L. 2141. The star was described as appearing either hazy or double in the opera-glass. The magnitudes of the two stars are given as 5·8 and 6·4 in the U.A. The S.M.P. reverses this order, making the magnitudes 6·4 and 5·8.

241. Nov. 3, 4·8; Dec. 11, 5·0; Mar. 7, 4·9.

244. Either η^1 or η^2 Doradus would appear to be variable. The following are the different observations of the two stars:—

	η^1. M.	η^2. M.
B.	5⅔	5⅓
H.	6	6
U.A.	6·0	5·5
W.	4·7	5·6
S.M.P.......	5·84	4·81

The difference between the last two sets of observations is very striking, and a simple explanation would be that the magnitudes of the two stars have been accidentally transposed. This, however, could hardly be the case with the observations of the present Catalogue, as a note to the observation of η^1 states that the star was "the brighter and most south of two stars." η^1 is shown very much smaller than η^2 in the star map used at the time, and the foregoing note was evidently made because of the magnitudes being found reversed from what they are in the map. The observations of 1885 were made on Dec. 31.

245. Nov. 3, 6·35; Dec. 11, 5·95. 6 mag. in B., 6·5 in H. Possibly variable.

248. See 244.

249. Nov. 3, 4·4; Dec. 11, 4·1; Mar. 17, 4·75.

251. Nov. 3, 6·05; Dec. 11, 5·9; Mar. 22, 5·35.

252. Nov. 3, 6·25; Dec. 11, 5·9; Mar. 22, 5·65.

254. Nov. 3, 6·3; Dec. 11, 5·7; Mar. 17, 5·55.

255. Nov. 14, 5·85; Mar. 22, 5·95. Variability seems highly probable, there being a difference of a whole mag. between the S.M.P. value and that of the present Catalogue. B. made it 6 mag.

257. The H.P. mag. is 4·07.

258. This star is η^3 Doradus of the Brisbane Catalogue. It is not in U.A., S.M.P., B., or H. The observation was made on Dec. 31.

259. Combined with B. 1230.

260. Dec. 23, 5·25; Feb. 21, 5·15; Mar. 13, 5·4.

261. *Canopus*, the brightest star in the heavens with the exception of Sirius. The observations are:—

	M.		M.
Nov. 16....	−0·55	Mar. 2 ...	−0·7
„ 21....	1·0	„ 7....	0·8
„ 24....	1·2	„ 8....	0·9
Dec. 11....	0·8	„ 10....	0·8
Feb. 14....	1·1	„ 12....	0·95
„ 17....	0·8	„ 16....	1·0
„ 21....	0·6	„ 17....	0·8
„ 28....	0·3	„ 20....	0·8
Mar. 1....	−0·5	„ 22....	−0·9

The observations are in very satisfactory accordance considering the great brilliancy of the star. The mean magnitude is −0·81, which also agrees satisfactorily with the S.M.P. value. The comparison stars employed were Sirius and Rigel. The following observations were made of the color of Canopus:—Feb. 12, bluish white; Feb. 16, creamy white; Feb. 27, flushed white; Feb. 28, yellowish white. The first three observations were made with the 2¾-in. refr., the last one with the opera-glass.

262. Feb. 21, 5·85; Mar. 13, 5·8. Perhaps var. B. made it 5⅔.

263. Nov. 14, 5·5; Nov. 24, 5·5; Mar. 17, 5·45.

264. Feb. 21, 5·6; Mar. 13, 5·25 (rough observation).

267. Mar. 17, 5·9; Mar. 25, 5·3; Mar. 28, 5·4.

270. π^1 Doradus is marked "*r*" in the U.A., but not π^2.

272. The observation was made on Feb. 21. B. gives the mag. as 5⅔, H. as 6·5.

273. Mar. 17, 5·7; Mar. 25, 5·6; Mar. 28, 5·2. The H.P. mag. is 5·66. B. made it 5⅓, Heis 5⅔.

275. Mar. 17, 5·4; Mar. 25, 5·45; Mar. 28, 4·9. The H.P. mag. is 5·28. B. made it 5⅓, Heis 5⅔.

283. The H.P. mag. is 5·18.

284. Nov. 14, 5·4; Nov. 24, 5·4; Mar. 28, 4·85.

285. Nov. 12, 4·4; Mar. 17, 3·9; Mar. 20, 3·7; Mar. 25, 4·1; Mar. 28, 4·1. The H.P. mag. is 3·92.

286. Mar. 17, 5·5; Mar. 25, 5·7; Mar. 28, 5·1.

290. Feb. 21, 3·8; Mar. 13, 3·1.

291. H. gives the mag. as 6·5; but has he not by accident transposed the magnitudes of A Carinæ and L. 2490? The latter is 6·3 in the U.A., but 4·5 according to H.

293. Feb. 21, 5·0; Feb. 27, 5·2.

296. Nov. 14, 5·5; Nov. 24, 5·0; Mar. 17, 4·9; Mar. 25, 4·8.

299. Nov. 13, 5·6; Nov. 17, 5·5; Nov. 24, 5·0.

309. Suspected variable by Gould. The observations are:—

	M.		M.		M.
Nov. 14....	5·3	Jan. 4....	5·4	Mar. 10....	5·05
„ 15....	5·15	Feb. 9....	5·2	„ 11....	5·15
„ 16....	5·15	„ 12....	5·0	„ 12....	5·05
„ 17....	5·3	„ 17....	4·9	„ 16....	5·0
„ 21....	4·8	„ 21....	5·1	„ 17....	5·0
„ 24....	4·85	„ 28....	5·1	„ 20....	5·0
Dec. 11....	5·2	Mar. 1....	4·9	„ 22....	4·95
„ 23....	4·9	„ 2....	5·0	„ 25....	5·0
„ 29....	5·2	„ 5....	5·0	„ 28....	(4·5)
„ 31....	5·3	„ 7....	5·1	„ 30....	(4·55)
Jan. 3....	5·4	„ 8....	5·2		

The last two observations have been rejected, the star's altitude having been very low. The above observations tend to confirm Gould's suspicions of variability. Those of Dec. 23, 29, 31, and Jan. 3 for instance, indicating a steady decline, look remarkably suspicious, whilst nearly all the observations are satisfactorily represented by a period of about 30 days. As, however, the amount of variation is only about half a magnitude, a very careful set of observations will be required to settle the question. The color was noted as bluish white on Feb. 16 with the 2¾-in. refr.

310. The well-known variable L^2 Puppis, Ch. 2583.

	M.		M.		M.
Nov. 14	5·45	Jan. 25	3·9	Mar. 8	5·35
,, 15	5·35	Feb. 9	3·95	,, 10	5·35
,, 16	5·25	,, ,,	(4·35)	,, 11	5·45
,, 17	5·35	,, 12	3·95	,, 12	5·25
,, 21	4·95	,, 17	3·9	,, 16	5·4
,, 24	5·1	,, 21	4·1	,, 17	5·3
Dec. 11	4·4	,, 28	4·4	,, 20	5·4
,, 23	3·9	Mar. 1	4·4	,, 22	5·45
,, 29	3·85	,, 2	4·5	,, 25	5·55
,, 31	3·6	,, 5	5·0	,, 28	(5·0)
Jan. 3	3·55	,, ,,	5·0	,, 30	(5·05)
,, 4	3·7	,, 7	5·4		

The star was very low at the time of the last two observations. Gould remarks that "the star is red in all its stages, and remarkably so when faint." On Feb. 16 the color was recorded as deep yellow with the 2$\frac{3}{4}$-in. refr. In the opera-glass it was generally noted as being very red or deep orange-red about the time of maximum. The above observations indicate a well-defined maximum for 1886, Jan. 10. From this date there was a gradual decline of 0·8 mag. in about 48 days, followed by a rather sudden drop of over 0·8 mag. in only 6 days.

311. Feb. 14, 3·75; Feb. 17, 3·75. Suspected var. by Gould. The S.M.P. measures, six in number, are very accordant.

314.

	M.		M.		M.
Nov. 13	2·25	Jan. 3	2·3	Mar. 11	2·4
,, 14	2·65	,, 4	2·3	,, 12	2·45
,, 15	2·25	Feb. 9	2·4	,, 16	2·45
,, 16	2·3	,, 12	2·3	,, 17	2·45
,, 17	2·3	,, 17	2·3	,, 20	2·45
,, 21	2·4	,, 21	2·45	,, 22	2·5
,, 24	2·4	,, 28	2·35	,, 25	2·5
,, ,,	2·3	Mar. 1	2·4	,, 28	2·45
Dec. 11	2·5	,, 7	2·55	,, 30	2·35
,, 23	2·5	,, 8	2·4	Apr. 2	2·25
,, 29	3·3	,, 10	2·5	,, 3	2·15
,, 31	3·0				

At the last two observations the star was very low. π Puppis was thought to be variable by Gould, who states that "our determinations for π *Puppis* vary from 2·4 to 2·9, a range altogether too wide to be accounted for by any personal difference due to color." On Nov. 27, 1870, it was estimated brighter than η Canis Majoris. A. W. Roberts, from his observations in 1891, rather questions the reality of variation, and suggests that a change in the color of the star observed by him might be the cause rather than the consequence of an apparent change in magnitude (*Memoirs* B. A. A. i. 56). The range of variation observed by him in 1891 was from 2·7 to 3·1 (on the scale of the U.A.). Again in 1892 the star was observed on 13 nights by Roberts, and on each occasion its magnitude was slightly fainter than that of η Canis Majoris, or about 3·0 on the U.A. scale (*Journal* B. A. A. iii. 371). The observations given above show, however, almost beyond doubt that the star is really variable, though very likely variation takes place in in irregular fashion, like that of α Orionis. It will be seen that all the observations are in satisfactory agreement with the exception of the two made on Dec. 29 and Dec. 31. These two observations differ by as much as 0·85 and 0·55 respectively from the mean magnitude, and since there are two consecutive observations, accidental error is highly improbable. And a careful examination of the original record fails to reveal any circumstance, such as the presence of twilight or moonlight, that might have affected the results. Clouds were troublesome on Dec. 29, but the night of Dec. 31 was remarkably clear and free from cloud. Usually the star was rated as about equal to η Canis Majoris, but on Dec. 29 it was recorded as 0·9 mag., and on Dec. 31 as 0·6 mag. fainter than that star. It seems pretty certain therefore that π Puppis suffered a temporary diminution in brightness at the end of 1885, amounting to at least three fourths of a magnitude. The S.M.P. measures are also discordant; and a recent series of observations by E. E. Markwick at Gibraltar in 1896–7 tend strongly to confirm variability, there being a difference of 1·1 mag. between the extreme observations (*English Mechanic*, vol. 66, p. 384). π Puppis is a very finely colored star, and in 1891 Roberts states that he observed "slight, but still very apparent, variation in its ruddy color." The following observations of 1885–6 also strongly suggest variation in color.

Nov. 11. Very fine orange.
„ 13. Pale red.
„ 14. Orange.
„ 15. Reddish orange.
„ 24. Reddish yellow.
Dec. 11. Deep reddish orange.
„ 23. Deep orange-red.
„ 29. Very red.
„ 31. Fine deep orange.
Jan. 3. Reddish yellow.
„ 4. Fine deep reddish.
Feb. 9. Very deep orange-red.
„ 12. „ „
„ 16. Reddish yellow.
Feb. 17. Deep reddish yellow.
„ 27. Deep reddish orange.
„ 28. Deep orange-red.
Mar. 1. Orange-red.
„ 7. Deep orange-red.
„ 8. Orange-yellow.
„ 10. Reddish orange.
„ 11. Deep reddish orange.
„ 16. Reddish orange.
„ 17. Orange.
„ 20. Deep reddish.
„ 22. Deep orange-red.
Apr. 2. Very deep orange-red.
„ 3. Orange-red.

The above observations were all made with the opera-glass excepting those of Feb. 16 and 17, which were made with the 2¾-in. refr. It is noteworthy that there was no particular change in the degree of redness at the time of the drop in brightness on Dec. 29 and 31.

315. Nov. 13, 5·15; Nov. 24, 4·5.

322. Nov. 14, 5·65; Mar. 25, 5·4. B. made it 5⅔, H. 6.

325. The H.P. mag. is 4·79.

329. This is R Puppis of the U.A. It was invisible in the opera-glass on Nov. 24, but there was a ¾ Moon.

338. Nov. 14, 4·25; Nov. 21, 4·15; Nov. 24, 4·6; Mar. 26, 4·75.

340. Nov. 14, 4·95; Nov. 21, 4·65; Feb. 12, 4·7; Feb. 17, 4·5; Feb. 21, 4·75; Mar. 16, 4·6; Mar. 21, 4·7; Mar. 22, 4·75; Mar. 30, 4·4 (very low). The star was thought to be variable by A. W. Roberts. The observations published in *Monthly Notices*, xlvii. 91, are the observed magnitudes uncorrected for absorption.

341. Nov. 14, 4·2; Nov. 21, 4·25; Nov. 24, 4·55. H. curiously gives the mag. as 6·5. B. made it 5.

343. The var. V Puppis, Ch. 2852.

	h	m		M.
Nov. 14....	16	26	G.M.T.	5·3
„ 21....	16	5	„	4·35
Feb. 12....	0	37	„	4·55
„ 17....	0	45	„	4·5
„ 21....	2	16	„	4·75
Mar. 16....	3	40	„	4·8
„ 21....	6	20	„	5·1
„ 22....	5	27	„	4·55
„ 30....	5	33	„	4·95

The observations published in *Monthly Notices*, xlvii. 91, are the observed magnitudes uncorrected for absorption. The last result is based on a comparison with L. 3069, the assumed mag. of the latter being the mean of the values in the S.M.P. and the present Catalogue.

346. Dec. 29, 5·9; Mar. 12, 5·8.

349. Dec. 29, 5·75; Mar. 11, 5·8. These refer to the combined light of L. 3178 and B. 1903, as does also the U.A. result. The S.M.P. measure probably refers to the light of the former star alone.

350. Nov. 14, 1·65; Nov. 21, 1·65; Feb. 21, 1·8; Mar. 16, 1·6. The S.M.P. measures are rather discordant. The object is marked "cum" in the U.A., the magnitudes of three stars being given as 3, 6¼, and 9.

355. Suspected var. by Gould. The observation was made on Nov. 14.

360. Nov. 14, 5·3; Nov. 24, 5·1; Mar. 26, 5·25.

362. Dec. 29, 5·55; Mar. 11, 5·75.

363. Nov. 14, 5·45; Feb. 21, 4·85; Mar. 16, 4·5.

368. Feb. 14, 3·7; Feb. 17, 3·8; Mar. 12, 3·8. An observation 4·4 on Mar. 11 has not been used, a note stating "to be rejected." The Cordoba estimates were discordant, ranging from 3·6 to 4·4. The S.M.P. measures are also discordant.

369. Nov. 14, 5·8; Feb. 21, 5·25; Mar. 16, 5·1.

371. Nov. 14, 5·6; Feb. 21, 5·05; Mar. 16, 5·0.

377. Nov. 16, 4·1; Nov. 24, 4·3; Mar. 26, 4·45 (very low). The S.M.P. measures are discordant.

378. Nov. 14, 4·1; Feb. 21, 3·55; Mar. 12, 4·2; Mar. 16, 3·85; Mar. 20, 3·75; Mar. 26, 3·95. Gould states that the U.A. estimates varied from 3·9 to 4·3. The S.M.P. measures are discordant.

382. Nov. 16, 3·5; Nov. 24, 3·7; Mar. 26, 4·3 (very low). The last result has been given ½ weight. The H.P. mag. is 3·55.

384. Nov. 14, 4·3; Feb. 21, 4·15; Mar. 26, 4·1. The S.M.P. measures are discordant.

385. Nov. 14, 2·1; Feb. 21, 1·65; Mar. 16, 1·75. The S.M.P. measures are discordant.

389. Nov. 21, 4·45; Dec. 29, 5·05; Mar. 11, 4·7; Mar. 20, 4·7.

390. Nov. 16, 5·8; Mar. 26, 6·75 (very low). These differ so considerably from the S.M.P. result that variability seems highly probable. Moreover the S.M.P. measures are discordant. B. made it 6, H. 5.

395. Feb. 14, 5·15; Feb. 17, 5·85; Mar. 11, 5·6.

404. Nov. 14, 2·0; Feb. 21, 1·7; Mar. 22, 2·35; March 26, 2·0. A note to the observation of Feb. 21 says, "difficult to est. owing to its yellow color."

405. Nov. 21, 4·4; Dec. 29, 4·95; Feb. 12, 4·4; Feb. 17, 4·3; Mar. 8, 4·65.

406. Nov. 21, 4·4; Dec. 29, 4·8; Feb. 12, 4·4; Feb. 17, 4·2; Mar. 8, 4·4.

408. Nov. 21, 3·4; Dec. 29, 3·95; Mar. 11, 4·45; Mar. 12, 3·75; Mar. 16, 3·75; Mar. 17, 3·8; Mar. 20, 3·6; Mar. 21, 3·85; Mar. 22, 3·6. The observation of Mar. 11 has been rejected.

410. Hazy? in the opera-glass.

413. Nov. 14, 6·15; Feb. 21, 5·55; Mar. 12, 5·55; Mar. 20, 5·7; Mar. 22, 5·6; Mar. 26, 6·0 (very low); Mar. 30, 5·65.

415. Nov. 14, 5·55; Feb. 21, 4·55; Mar. 12, 5·05; Mar. 20, 4·9; Mar. 21, 5·05; Mar. 22, 5·2; Mar. 26, 5·75 (very low); Mar. 30, 4·85. The observation of Mar. 26 has been rejected.

416. Nov. 14, 5·05; Feb. 21, 4·35; Mar. 12, 4·55; Mar. 20, 4·5; Mar. 22, 4·7; Mar. 29, 5·1 (very low); Mar. 30, 4·95.

417. Mar. 21, 1·4; Dec. 29, 0·9; Mar. 8, 1·55. The S.M.P. measures are discordant.

419. Nov. 21, 4·0; Dec. 29, 4·4; Mar. 11, 4·95; Mar. 12, 4·5; Mar. 20, 4·65. Suspected var. by Gould, who remarks that the star "has appeared to fluctuate through about half a unit, from 4·6 to 5·2; but its strong red color renders comparisons with whiter stars so difficult and gives rise to so marked personal differences of estimates, that the variability is not altogether certain." The above observations certainly tend to confirm variability, which cannot however yet be considered as established.

424. Dec. 29, 5·5; Mar. 8, 5·4.

426. Nov. 21, 4·7; Dec. 29, 4·7; Mar. 11, 5·35; Mar. 12, 4·95.

429. An observation 5·25 on Mar. 26 has been rejected, the star having been very low and the correction for absorption uncertain.

430. The magnitudes of ζ^1 and ζ^2 Antliæ in the present Catalogue accord well with those given in the U.A. when corrected for the systematic difference in scale, but differ somewhat widely from the S.M.P. measures. The latter also reverse the order of brightness of the two stars. Below are the separate observations:—

	ζ^1.	ζ^2.
	M.	M.
Nov. 16......	5·4	5·5
,, 24......	5·65	5·75
Apr. 2......	5·5	5·5

433. See 430.

439. Nov. 14, 5·7; Feb. 21, 4·9; Mar. 12, 4·75; Mar. 20, 5·55; Mar. 21, 5·35; Mar. 22. 5·65; Mar. 26, 5·85; Mar. 30, 5·4. A note to the observation of Feb. 21 states that estimation was difficult owing to the closeness of the star to ψ Velorum. Probably this is the reason why the observations are so discordant.

433. The var. N Velorum, Ch. 3409.

	h	m			
Feb. 21......	3	39	G.M.T.	Mag.	= 3·35
Mar. 11......	4	47	,,	,,	= 3·2.

Gould remarks that the star "has a peculiar yellow color, contrasting markedly with that of the numerous red stars in its vicinity." The following observations were made with the opera-glass: Dec. 29, fine deep yellow; Feb. 27, deep yellow; Mar. 11, yellow.

437. The var. R Carinæ, Ch. 3418. Dec. 29, 5·3; Mar. 11, 5·55.

445. Dec. 29, 5·9; Mar. 12, 5·75. Invisible in the opera-glass on Mar. 11, but the night was hazy and there was a ⅓ moon.

446. Nov. 21, 4·5; Dec. 29, 4·6; Mar. 11, 5·05. The S.M.P. measures are rather discordant.

451. The var. *l* Carinæ, Ch. 3495. Nov. 21, 3·8; Dec. 29, 3·7; Mar. 11, 4·55; Mar. 12, 3·95.

453. Nov. 21, 2·8; Dec. 29, 2·8; Mar. 10, 2·75. The S.M.P. measures are discordant.

455. The observation was made on Feb. 28, rather misty and star low.

456. The observation was made on Mar. 12.

457. Nov. 21, 3·05; Feb. 21, 3·6; Mar. 12, 3·8; Mar. 21, 3·7.

459. The observation was made on Nov. 14. Another one, 5·95, on Mar. 26 has been rejected, the star having been very low and the correction for absorption uncertain.

460. Feb. 21, 6·45; Mar. 12, 4·85; Mar. 21, 6·0; Mar. 22, 6·0. Unless the observation of Mar. 12 is in error, the star is certainly variable.

461. Nov. 14, 6·45; Feb. 21, 6·55. Variable according to Gould, who called it R Velorum.

465. Feb. 14, 6·0; Feb. 28, 6·3.

467. Nov. 14, 5·7; Feb. 21, 5·65; Mar. 21, 5·65; Mar. 26, 6·25 (very low). The last observation has been rejected.

469. Nov. 14, 4·65; Feb. 21, 3·85; Mar. 12, 3·75; Mar. 20, 3·7; Mar. 21, 3·95; Mar. 22, 4·1; Mar. 26, 4·15.

470. Nov. 21, 4·8; Dec. 29, 5·5; Mar. 11, 5·45.

471. Nov. 21, 2·8; Dec. 29, 3·5; Mar. 8, 3·3.

472. Dec. 29, 3·7; Mar. 11, 3·65. Suspected variable by Gould. A. W. Roberts found it 3·4 (on the scale of the U.A.) in May and June 1891, but 3·7 in Feb. 1892. In the former year it was brighter than *p* Carinæ, but in the latter decidedly fainter, being scarcely superior to *a* Carinæ (*Journal* B. A. A. ii. 333).

473. Feb. 21, 4·85; Mar. 12, 5·2. These differ considerably from the S.M.P. value, but variation is unlikely (*cf.* 474). B. made it 5⅓, H. 6·5.

474. Feb. 21, 4·65; Mar. 12, 5·1.

477. Nov. 16, 3·8; Nov. 24, 4·0; Apr. 2, 3·75. Suspected variable by Gould. The H.P. mag. is 4·50. Argelander and Heis both made it 4. Variability seems highly probable.

478. Nov. 21, 3·1; Dec. 29, 4·1; Mar. 8, 3·8. Suspected var. by Gould, the Cordoba estimates varying from 4·2 to 5·1. The above observations strongly confirm this. B. and H. both made it 5. The foregoing results relate to the combined light of I Carinæ and L. 4322, but the S.M.P. measures probably refer to the former only. On Nov. 21 the star seemed to be double in the opera-glass.

479. Nov. 21, 4·4; Dec. 29, 5·2; Feb. 21, 4·75; Mar. 12, 5·1.

480. Nov. 21, 3·8; Dec. 29, 4·05; Mar. 11, 4·4.

482. Nov. 16, 5·4; Nov. 24, 5·1; Apr. 2, 4·95. B. made it 5⅔, H. 6. The H.P. mag. is 5·56. Sawyer made the following observations (on the scale of the U.A.):—1884 Mar. 25, 5·9; 1885 Apr. 6, 5·8; 1887 Apr. 13, 5·75; 1888 Apr. 8, 5·45; 1889 Mar. 30, 5·65. The variability of this star seems certain.

489. Nov. 21, 4·4; Dec. 29, 4·8; Mar. 11, 5·2.

490. t^1 Carinæ is given as var. in the U.A., where the observed magnitudes are stated to vary from 5·4 to 6·3. t^2 Carinæ was also suspected of variation, the observations varying by not less than 0·6 mag. The observations of 1885–6 are:—

	t^1. M.	t^2. M.
Nov. 21	4·8	4·6
Dec. 29	5·55	5·2
Mar. 11	5·45	5·65
„ 12	5·0	4·8

Although one or both may be variable, it seems not improbable that the discordances are due to the pronounced reddish colors of the two stars.

494. An observation, 5·15, on Feb. 28 has been rejected, the star having been very low and the correction for absorption uncertain.

495. See 490.

498. Nov. 21, 4·0; Dec. 29, 4·5; Mar. 11, 4·65. Estimation was stated to be difficult on all three nights owing to the nearness of the star to θ Carinæ.

499. Nov. 14, 2·4; Nov. 16, 2·35; Nov. 21, 2·3; Dec. 29, 3·2; Mar. 11, 2·55. The considerable difference between all the observations (except that of Dec. 29) and the value in the S.M.P. is rather striking. The color of θ Carinæ was not directly recorded, but from recollection the star shone with a peculiar, intense, steely lustre.

500. Nov. 21, 4·5; Mar. 11, 5·55; Mar. 12, 4·9. Suspected var. by Gould.

502. The var. η Carinæ, Ch. 3847. On Nov. 21 there was a faint misty spot in the opera-glass, with occasional indications of a faint stellar point in it. The estimated mag. of the stellar point was 5·6. On Dec. 29 there was a conspicuous milky patch visible; but with all attention no stellar point could be seen.

507. Feb. 14, 5·0; Feb. 28, 5·7.

509. Mar. 11, 5·3; Mar. 12, 4·9. The S.M.P. measures are rather discordant.

511. Mar. 11, 4·45; Mar. 12, 3·8. B. gives the mag. as 4⅓, H. as 6.

515. Apr. 3, 5·85; Apr. 7, 5·9. Suspected var. by Gould.

518. Feb. 12, 5·8; Feb. 28, 5·9. The S.M.P. measures are discordant.

521. Apr. 3, 5·55; Apr. 7, 5·6. Suspected var. by Gould. The H.P. mag. is 5·59. Argelander and Heis both made it 5.

534. Apr. 2, 5·7; Apr. 3, 5·6. The S.M.P. measures are very accordant. B. and H. both made it 6, Heis 6⅓. The H.P. mag. is 5·40. Sawyer observed the star on four nights between 1884 and 1888, making the mag. 5·7, 5·75, 5·7, and 5·7 on the scale of the U.A.

535. Apr. 2, 2·9 (rough obs.); Apr. 3, 3·25. The H.P. mag. is 3·76. Argelander and Heis both made it 4. The S.M.P. measures are not accordant.

539. Place estimated from map.

545. Mar. 5, 5·25; Mar. 7, 5·7. Suspected var. by Gould, the Cordoba estimates varying from 5·4 to 6·1. B. made it 5⅓. The three S.M.P. measures are accordant.

546. Apr. 2, 4·3 (not good); Apr. 3, 4·7.

547. Mar. 5, 5·3; Mar. 7, 5·6; Mar. 16, 5·4; Mar. 21, 4·95.

548. The H.P. mag. is 5·37.

551. Mar. 5, 4·85; Mar. 7, 5·2; Mar. 17, 5·35; Mar. 20, 5·4; Mar. 21, 5·7. The steady decline in brightness is striking and suggestive of variability.

552. Feb. 12, 3·9; Mar. 11, 4·2. The suspected variability seems very doubtful.

553. Mar. 5, 4·1; Mar. 7, 4·75; Mar. 16, 4·55; Mar. 20, 4·4; Mar. 21, 4·3.

554. Feb. 12, 4·95; Mar. 11, 5·3. According to Gould the color is an intense orange-red.

560. Apr. 2, 3·9; Apr. 3, 4·15.

561. Apr. 2, 5·6; Apr. 3, 5·6.

563. Mar. 5, 5·35; Mar. 7, 5·7; Mar. 17, 4·4; Mar. 21, 4·25. Variability seems certain, the first two observations differing by more than a whole mag. from the last two. B. made it 6. The S.M.P. measures are not very accordant.

567. Feb. 12, 5·6; Mar. 12, 5·7.

571. Feb. 14, 4·85; Feb. 28, 5·85.

574. Mar. 5, 5·4; Mar. 7, 4·85; Mar. 16, 4·95. B. made it 5⅔, H. 6·5.

575. Nov. 16, 2·1; Mar. 5, 2·25; Mar. 7, 2·65; Mar. 16, 2·2. B. and H. both give the mag. as 3.

578. An observation 3·3, marked "not good," on Nov. 16 has been rejected.

579. Mar. 5, 5·65; Mar. 7, 5·45; Mar. 17, 5·5; Mar. 21, 6·15.

580. Dec. 29, 2·6; Feb. 12, 2·3; Feb. 21, 3·35; Feb. 28, 3·2; Mar. 1, 3·5; Mar. 2, 3·25; Mar. 11, 2·95; Mar. 12, 2·9; Mar. 17, 3·0; Mar. 20, 3·05; Mar. 21, 3·05. The S.M.P. measures are discordant.

581. Dec. 29, 4·2; Feb. 12, 4·55; Mar. 11, 4·8. Suspected var. by Gould, the Cordoba estimates varying from 4·3 to 5·3. The S.M.P. measures are also discordant.

584. Mar. 17, 5·15; Mar. 20, 5·5; Mar. 21, 5·5.

588. Feb. 12, 5·75; Feb. 28, 6·05.

591. Mar. 7, 5·15; Apr. 2, 5·55. Suspected var. at Cordoba.

592. Dec. 29, 1·05 (under-rated?); Feb. 12, 0·7; Feb. 21, 0·9; Feb. 28, 0·65; Mar. 1, 0·9; Mar. 2, 0·65; Mar. 17, 0·75; Mar. 20, 0·6; Mar. 21, 0·7. The comparison stars were β Orionis and ε Canis Majoris. The S.M.P. measures are discordant.

593. An observation 4·1 on Nov. 16, marked "not good," has been rejected.

596. An observation 3·2 on Nov. 16, marked "not good," has been rejected.

598. Dec. 29, 1·4; Feb. 12, 1·35; Feb. 21, 1·25; Feb. 28, 1·2; Mar. 1, 1·25; Mar. 2, 1·45; Mar. 12, 1·3; Mar. 17, 1·35; Mar. 20, 1·45; Mar. 21, 1·5. Suspected var. at Cordoba. The S.M.P. measures are not very accordant.

599. Dec. 29, 5·8; Feb. 12, 5·7; Mar. 11, 5·8; Mar. 12, 5·65.

605. An observation 3·05 on Nov. 16, marked "not good," has been rejected.

606. The var. R Muscæ, Ch. 4536. The observation was made on Dec. 31 at $6^h\ 53^m$ G.M.T.

608. An observation 1·25 on Nov. 16, marked "not good," has been rejected.

610. Nov. 16, 4·05 (not good); Mar. 5, 4·65; Mar. 7, 4·05; Mar. 16, 4·65. Estimation difficult owing to the red color of the star and its closeness to γ Centauri. B. made it 6 mag.

612. Dec. 29, 6·1; Feb. 12, 6·15; Mar. 11, 5·7.

613. Dec. 29, 4·8; Feb. 12, 4·9; Mar. 7, 4·8; Mar. 11, 5·05; Mar. 12, 4·95; Mar. 17, 5·0; Mar. 20, 5·05; Mar. 21, 4·95.

616. Dec. 29, 1·25; Feb. 12, 0·8; Feb. 21, 1·2; Feb. 28, 1·5; Mar. 1, 1·4; Mar. 2, 1·35; Mar. 17, 1·15; Mar. 20, 1·1; Mar. 21, 1·2. The S.M.P. measures are discordant. B. made it 1⅔, H. 2·5.

617. Feb. 12, 5·35; Feb. 28, 5·7. The S.M.P. measures are discordant.

618. Mar. 7, 5·6; Mar. 21, 6·2; Apr. 2, 5·3 (alt. very low). The last observation has been rejected.

620. Like a hazy, ill-defined star in the opera-glass. On Feb. 9 the colors of some of the chief stars were estimated as follows:—7 = yellow, 52 = yellowish white, 63 = deep orange-red, 76 = yellowish, 77=yellowish, 80=yellowish white. The numbers of the stars are those of Herschel (Cape Observations, p. 17).

623. μ Crucis and B. 4238 considered as one object. The U.A. magnitudes of these two stars are 4·4 and 5·5; S.M.P. 4·29 and 5·42. B. made the combined light 4⅓, H. 4.

624. The observation was made on Mar. 21.

632. Dec. 29, 5·1; Feb. 12, 5·4; Mar. 11, 5·65. The S.M.P. measures are not very accordant.

633. The observation was made on Mar. 21.

634. Mar. 5, 5·05; Mar. 7, 4·5; Mar. 21, 4·95. The S.M.P. measures are not accordant.

636. Mar. 7, 5·2; Mar. 17, 5·25; Mar. 21, 5·3; Apr. 2, 5·1.

638. Mar. 5, 5·05; Mar. 7, 4·8; Mar. 21, 5·15.

641. Mar. 21, 5·55; Apr. 2, 5·4. There is some evidence in favor of variability. Argelander and Heis both made it 4⅔, B. 5⅔, H. 5. The H.P. mag. is 5·53.

645. The observation was made on Mar. 21.

646. Feb. 12, 5·5; Mar. 12, 5·2 (rough).

649. Feb. 12, 5·25; Feb. 28, 5·55. The S.M.P. measures are discordant.

651. Mar. 7, 4·4; Apr. 2, 4·4.

652. Feb. 12, 6·2; Mar. 11, 5·8; Mar. 12, 5·35 (rough). The last observation has been given ½ weight.

653. The observation was made on Mar. 5, and unless there is some error the star is probably var.

654. Feb. 14, 1·95; Mar. 5, 2·75; Mar. 7, 2·4; Mar. 17, 2·4; Mar. 21, 2·85. The S.M.P. measures are discordant.

660. An observation 4·65 on Mar. 21, marked "possibly an error in recording," has been rejected.

661. Mar. 7, 3·2; Mar. 17, 3·35; Mar. 21, 3·6; Apr. 2, 4·0. Gould remarks (U.A. p. 317) that certain sequences disclosed changes in magnitude from 3·3 to 3·7. The S.M.P. measures are also discordant. The observations of 1886 show a steady diminution in brightness from 3·2 to 4·0. Variability seems highly probable.

663. Mar. 21, 4·75; Apr. 2, 4·4. Suspected variable by Gould, the Cordoba estimates varying from 4·5 to 5·1. The S.M.P. measures are discordant.

665. The observation was made on Mar. 21. The S.M.P. measures are discordant.

667. Mar. 5, 5·65; Mar. 8, 5·45. The S.M.P. measures are discordant. B. gives the mag. as 5⅔.

668. The H.P. mag. is 4·66.

670. The observation was made on Mar. 5.

672. Mar. 7, 2·95; Mar. 17, 2·85; Mar. 21, 2·45. The S.M.P. measures are discordant.

675. Mar. 5, 5·4; Mar. 7, 5·35; Mar. 21, 5·55. These differ so widely from the mag. in the S.M.P. that variability seems probable. B. made it 5⅓, H. 6.

677. Mar. 7, 4·0; Mar. 17, 3·75; Mar. 21, 3·95. The S.M.P. measures are discordant.

678. Feb. 12, 5·2; Feb. 14, 5·0. The star was announced as variable, 5·5 to 6·6, in the U.A., but the variability does not seem to have been confirmed yet. The mean of the above two observations differ by as much as 0·6 mag. from the S.M.P. value. Moreover the S.M.P. measures are very discordant, the residuals differing by more than a

whole magnitude. There can be no doubt, therefore, of the variability of this star.

680. Feb. 14, 0·35; Feb. 28, 0·65; Mar. 1, 0·75; Mar. 21, 0·65. The S.M.P. measures are discordant.

684. Mar. 11, 2·2; Mar. 21, 2·15; Apr. 2, 2·1. The H.P. mag. is 1·73.

687. Feb. 12, 4·45; Feb. 28, 4·55. The S.M.P. measures are discordant.

689. ι Lupi and the neighboring star L. 5891 were observed as under:—

	ι Lupi. M.	L. 5891. M.
Feb. 17	3·2	5·25
Mar. 12	3·2	5·1
„ 21	3·75	5·15
Apr. 2	4·1	5·0

The variability of ι Lupi seems pretty certain, the two accordant observations of Feb. 17 and Mar. 12 differing so widely both from the last two observations and from the mean S.M.P. mag. Moreover the S.M.P. measures are discordant. B. made the mag. 4⅗, H. 4·5.

692. Mar. 11, 4·3; Mar. 21, 4·85; Apr. 2, 4·75.

693. Mar. 5, 5·15; Mar. 7, 5·0; Mar. 21, 5·4. The S.M.P. measures are discordant.

694. The observation was made on Dec. 31. The S.M.P. measures are discordant.

695. Mar. 11, 5·1; Mar. 21, 5·15; Apr. 2, 4·9. The S.M.P. measures are not accordant.

697. Feb. 17, 4·2; Mar. 12, 4·6; Mar. 21, 5·05; Apr. 2, 4·5.

700. Mar. 12, 5·3; Apr. 2, 5·2.

706. Feb. 14, −0·2; Feb. 28, −0·75; Mar. 1, −0·7. The comparison stars were Sirius and Rigel.

709. Feb. 17, 2·5; Mar. 12, 2·15; Mar. 21, 2·6. The S.M.P. measures are discordant.

710. Mar. 11, 4·95; Mar. 21, 4·75; Apr. 2, 5·05. These differ so widely from the S.M.P. mag. that variability seems probable. B. gives the mag. as 4⅗, H. as 4. The S.M.P. measures are not accordant.

711. Mar. 11, 4·1; Mar. 21, 4·3; Apr. 2, 4·55. These differ considerably from the S.M.P. mag., but the difference is perhaps due to the yellow color of the star.

714. Feb. 12, 5·55; Mar. 11, 5·45.

715. Feb. 17, 5·8; Mar. 12, 5·6; Mar. 21, 5·75. B. and H. both made it 6 mag.

716. Feb. 12, 5·45; Feb. 28, 5·45. The S.M.P. measures are discordant.

718. Feb. 17, 4·85; Mar. 12, 4·4; Mar. 23, 5·1; Apr. 2, 4·5.

719. The var. R Apodis, Ch. 5319:—

	h	m		
Feb. 12	2	24	G.M.T.	Mag. = 5·6.
„ 14	5	23	„	„ = 5·0.

720. Dec. 31, 5·55; Feb. 12, 5·75; Mar. 11, 5·75.

721. The observation was made on Feb. 12. The S.M.P. measures are discordant.

726. Mar. 21, 5·8; Apr. 2, 5·6. Suspected variable to the extent of half a magnitude at Cordoba.

730. Feb. 17, 4·05; Mar. 12, 4·45; Mar. 21, 4·45.

732. Feb. 12, 5·25; Mar. 11, 5·25. These two accordant observations differ so widely from the U.A. and S.M.P. values, that variability seems highly probable.

734. Feb. 17, 5·85; Mar. 12, 5·5. The S.M.P. measures are discordant.

735. Feb. 12, 6·15; Feb. 14, 6·05. These two accordant observations differ so widely from the S.M.P. mag., that variability appears certain. Moreover the S.M.P. measures are discordant. The star was not observed by either B. or H. It is No. 345 of Birmingham's Catalogue of Red Stars, and is described in Herschel's Cape Observations as being "almost scarlet."

739. Combined with L. 6259, mag. 6·3 in U.A. On Feb. 12 it was described as appearing closely double in the opera-glass. The S.M.P. magnitude refers to δ Circini alone.

740. Feb. 17, 5·25; Mar. 23, 5·4; Apr. 2, 5·3. The S.M.P. measures are discordant.

743. Dec. 31, 4·0; Feb. 12, 4·1; Mar. 11, 4·6.

745. The var. R Triang. Aust., Ch. 5465.

	h	m		
Feb. 12 ..	4	1	G.M.T.	Mag.=6·35.
„ 14 ..	5	47	„	„ =6·35.

746. Feb. 17, 4·55; Mar. 12, 4·55; Mar. 21, 4·65. B. made it 5, H. 4.

748. Feb. 17, 3·1; Mar. 11, 3·3; Mar. 23, 3·8; Apr. 2, 3·55. The S.M.P. measures are not accordant. Gould remarks that indications of variability have been perceived in this star.

749. An observation 4·85 on Mar. 10, marked "not good," has been rejected.

751. Feb. 17, 3·5; Mar. 11, 3·4; Mar. 23, 3·9; Apr. 2, 4·15. Gould remarks that the star "is very red, which may account for the diversity of the magnitudes assigned to it by different astronomers."

753. Feb. 17, 3·25; Mar. 12, 3·45; Mar. 23, 3·75; Apr. 2, 3·9. The S.M.P. measures are discordant.

754. Feb. 12, 6·05; Feb. 14, 6·05. The star was suspected to fluctuate between 6·4 and 6·8 mag. at Cordoba.

755. Feb. 17, 4·65; Mar. 11, 4·8; Mar. 23, 5·45; Apr. 2, 5·25.

759. Feb. 17, 4·95; Mar. 11, 5·15; Mar. 12, 5·0; Mar. 23, 5·15; Apr. 2, 4·8.

761. Feb. 12, 4·8; Feb. 14, 4·1.

762. Feb. 12, 5·15; Feb. 14, 5·4. The S.M.P. measures are discordant.

765. Feb. 17, 4·85; Mar. 12, 4·95; Mar. 23, 5·15; Apr. 2, 5·1. The S.M.P. measures are discordant.

767. Feb. 17, 4·45; Mar. 12, 4·95; Mar. 23, 5·0; Apr. 2, 5·2. These observations differ so largely from the value given in the S.M.P. that variability seems highly probable. The differences are almost too great to be ascribed to the red color of the star. B. made the mag. 5⅓, H. 5.

768. Feb. 17, 4·85; Mar. 11, 4·85; Mar. 23, 4·9; Apr. 2, 5·15. The H.P. mag. is 4·58. Heis made it 5.

769. Feb. 17, 4·75; Mar. 12, 4·95; Mar. 23, 5·25; Apr. 2, 5·0. The S.M.P. measures are not accordant.

770. Feb. 17, 5·55; Mar. 11, 5·75; Mar. 23, 5·65; Apr. 17, 5·65.

772. Feb. 17, 5·65; Mar. 10, 5·15; Mar. 11, 5·25; Mar. 23, 5·65; Apr. 2, 5·55. Suspected var. at Cordoba, from near 5½ to 6½.

775. The H.P. mag. is 4·01.

780. An observation 3·95 on Mar. 10, marked "not good," has been rejected. The H.P. mag. is 4·49.

782. Feb. 17, 3·2; Mar. 12, 3·5; Mar. 23, 3·85; Apr. 2, 4·0.

784. Feb. 17, 5·25; Mar. 11, 5·25; Mar. 22, 5·1. The S.M.P. measures are discordant. B. made the star 6 mag., H. 5·5.

786. Feb. 17, 5·1; Mar. 11, 5·35; Mar. 21, 5·25. B. made it 5⅔, H. 4·5.

787. Feb. 17, 4·5; Mar. 12, 4·1 (difficult to est., star very unsteady); Mar. 23, 5·15; Apr. 2, 4·5. B. made the mag. 5⅔, H. 4.

789, 790. Too close in the opera-glass to estimate separately.

791. Feb. 17, 5·2; Mar. 11, 5·45. The S.M.P. measures are discordant. B. and H. both give it as 6 mag.

802. Feb. 17, 5·0; Mar. 11, 5·05; Mar. 21, 5·05.

803. Feb. 12, 5·5; Feb. 28, 5·9.

804. Feb. 17, 4·8; Mar. 11, 4·25; Mar. 22, 4·55. The S.M.P. measures are discordant.

806. Feb. 12, 6·1; Feb. 14, 7·1.

810. Feb. 17, 4·6; Mar. 11, 4·05; Mar. 22, 4·35. Suspected var. by Gould from 4¼ to 5.

815. Identification doubtful.

817. The H.P. mag. is 2·15.

822. Appeared as a good sized, hazy, cometic-looking star in the opera-glass.

827. Feb. 12, 5·3; Mar. 11, 6·0 (hindered by smoke from funnel); Mar. 12, 5·5. The S.M.P. measures are discordant.

829. Mar. 11, 5·7 (hindered by smoke from funnel); Mar. 12, 5·9.

831. The H.P. mag. is 5·26.

836. Feb. 12, 5·3; Feb. 14, 5·3. Suspected var. at Cordoba to the extent of a whole magnitude. B. made it 4⅔, H. 5·5.

839. The observation was made on Mar. 11.

847. Mar. 11, 5·75 (hindered by smoke from funnel); Mar. 12, 5·9.

848. Feb. 12, 5·8; Mar. 11, 5·55.

849. Feb. 12, 5·2 (haze about); Mar. 11, 5·4. Gould remarks that "the determinations for this object are unusually discordant, suggesting the probable variability of one of the three stars whose joint light is estimated."

853. The H.P. mag. is 2·84.

854. Feb. 12, 5·85; Feb. 28, 6·05.

855. The H.P. mag. is 1·68.

856. Feb. 12, 4·75; Mar. 11, 5·0; Mar. 21, 5·15.

857. The observations were made on Feb. 12 and 14. The star, although not certain, was suspected on Feb. 12. The atmospheric absorption at the time amounted to ·34 mag. at the altitude of the star.

859. Feb. 16, 4·85; Mar. 8, 5·25; Mar. 22, 5·05. Gould states that the Cordoba estimates ranged from 4·6 to 5·1. The mean of the three observations of 1886 differs by as much as 0·86 mag. from the mean S.M.P. value. The difference seems too great to be accounted for by the ruddy tinge of the star. B. made it 5⅓, H. 4·5.

870. Feb. 12, 5·45 (not good, haze about); Mar. 11, 5·15.

871. Feb. 12, 5·65 (not good, haze about); Mar. 11, 5·35.

872. Feb. 16, 3·3; Mar. 11, 3·75; Mar. 12, 3·55; Mar. 16, 3·3; Mar. 21, 3·7; Mar. 22, 3·55; Mar. 23, 3·4. The S.M.P. measures are discordant.

874. Feb. 16, 5·55; Mar. 11, 5·0; Mar. 21, 5·35; Mar. 22, 5·4. B. and H. both give it as 6 mag.

879. Mar. 11, 5·8; Mar. 12, 5·85.

882. Feb. 17, 4·8; Mar. 11, 5·4.

886. Feb. 17, 3·05; Mar. 12, 3·55; Mar. 22, 3·5. The H.P. mag. is 2·97.

889. Feb. 21, 5·4; Feb. 28, 5·35; Mar. 1, 5·45.

890. The H.P. mag. is 2·12.

891. Feb. 17, 3·7; Mar. 8, 4·05; Mar. 17, 2·95; Mar. 21, 4·2. The S.M.P. measures (7 in number) are fairly accordant.

893. Feb. 17, 4·55; Mar. 8, 4·85; Mar. 17, 4·3 (not good). B. made it 5, H. 4·5.

900. Feb. 17, 4·95; Mar. 8, 5·3; Mar. 22, 5·0. These differ so much from the S.M.P. mag. that variability seems probable. The S.M.P. measures are not very accordant. B. made it 5⅔, H. 5·5.

912. Feb. 17, 5·55; Mar. 11, 5·65.

913. The var. κ Pavonis, Ch. 6760. Feb. 14, 7^h 22^m G.M.T. Mag.=4·7.

914. Mar. 11, 5·75; Mar. 12, 5·9. As these differ widely from the mag. in the S.M.P. the star is possibly var.

919. The observation was made on Feb. 14.

927. Feb. 17, 4·95; Mar. 8, 4·6; Mar. 22, 4·9.

928. Feb. 17, 4·7; Mar. 8, 4·3; Mar. 22, 4·75.

929. Feb. 17, 4·7; Mar. 8, 4·3; Mar. 22, 4·7. The magnitudes of the 4 stars γ, δ, α, and β Coronæ Aust. according to the observations of 1886 are all lower than the S.M.P. values. It is improbable, therefore, that the difference in this case is due to variability.

933, 934, 935. The following are the observations of β^1, β^2, and α Sagittarii:—

	β^1. M.	β^2. M.	α. M.
Feb. 17	4·4	4·5	4·35
Mar. 12	3·7	3·7	4·45
„ 22	3·9	4·2	3·75

The second observation of α was made on Mar. 8. The S.M.P. measures of β^1 and α are discordant.

943. The observation was made on Feb. 14. Gould remarks that the star "is of a remarkably blue color. Our estimates of its magnitude range from 3·6 to 4·2." The S.M.P. measures are also discordant. The star was examined on Feb. 16 and 17 with the 2¾-in. refr., the color on both nights being recorded as white.

945. The observation was made on Feb. 14. The S.M.P. measures are not very accordant.

947. The observation was made on Feb. 14.

948. The H.P. mag. is 4·19.

951. Mar. 21, 5·25; Mar. 22, 5·25. B. made it 5⅔, H. 5·5.

955. Feb. 14, 2·45; Feb. 17, 1·95. The S.M.P. measures are discordant.

957. The observation was made on Feb. 14. The S.M.P. measures are discordant.

960. Feb. 21, 6·0; Feb. 28, 5·75. The S.M.P. measures are not very accordant.

961. The observation was made on Feb. 14. Suspected var. by Gould, 4·7 to 5·3.

964. The observation was made on Feb. 14. Suspected var. by Gould, 5·2 to 6·1. The S.M.P. measures are not very accordant.

967. The observation was made on Feb. 14. Gould states that the Cordoba determinations were numerous and peculiarly accordant. The S.M.P. measures are, however, discordant.

973. Oct. 30, 5·75; Oct. 31, 5·65; Nov. 4, 5·4. B. made it 6 mag.

975. Feb. 21, 5·0; Feb. 28, 5·15.

978. Oct 31, 4·9; Nov. 4, 5·15. B. gives the mag. as 6, H. as 5·5.

985. The observation was made on Feb. 14. Suspected variable at Cordoba to the extent of half a unit.

986. The H.P. mag. is 4·78.

988. The observation was made on Feb. 28.

989. Feb. 14, 4·5; Feb. 17, 4·55. There is some evidence in favor of variability. The S.M.P. measures are not accordant.

990. Oct. 31, 5·3; Nov. 4, 5·45. The S.M.P. measures are not accordant. B. and H. both made it 6 mag.

991. The observation was made on Feb. 28.

992. Identification doubtful. The observation was made on Oct. 31. The S.M.P. measures of L. 8809 are discordant.

996. Oct. 30, 5·5; Oct. 31, 5·6. Variability seems certain since these two accordant observations differ by 0·7 mag. from the S.M.P. value, whilst the S.M.P. measures are themselves very discordant, the residuals differing by nearly a whole magnitude. B. made it 5⅔, H. 6.

998. Oct. 30, 5·65; Oct. 31, 5·75. The S.M.P. measures are not very accordant. B. made it 6 mag., H. 6·5.

1000. The H.P. mag. is 4·23.

1001. Oct. 13, 4·7; Oct. 30, 4·65; Oct. 31, 4·6. As these differ considerably from the S.M.P. mag. the star may be variable, especially since three accordant observations of ι Piscis Aust. made on the same nights agree almost exactly with the S.M.P. value of that star. B. and H. both give the mag. of θ Piscis Aust. as 5, Argelander and Heis both as 4⅔. The H.P. mag. is 5·05.

1004. Oct. 15, 5·4; Oct. 30, 5·2; Oct. 31, 5·2.

1009. Oct. 15, 1·4 (unsatisfactory); Oct. 15, 2·0 (another obs.); Oct. 30, 1·6; Oct. 31, 2·0.

1010. The H.P. mag. is 4·53.

1011. Oct. 13, 4·25; Oct. 30, 4·95; Oct. 31, 4·75.

1014. Oct. 30, 5·1; Oct. 31, 5·4. Notes to both observations state that estimation was difficult on account of the proximity of the star to μ^1 Gruis. Neither B. nor H. observed it.

1019,20. The following observations relate to the combined light of π^1 and π^2 Gruis:—Oct. 15, 5·1; Oct. 30, 4·45; Oct. 31, 4·95. The U.A. magnitudes of the two stars are 6·7 and 5·9. In the map made use of in 1885 there is only a single star marked π in the place of these stars. There is no mention of duplicity in the observation of Oct. 15, but a note to that of Oct. 30 states that "it is a close double star in the opera-glass, the *preceding* component being slightly the brighter"; and another note on Oct. 31 says, "two stars close together and *equally bright* considered as one." The above notes make the relative brightness of the two stars quite different from what it is in the U.A., so that one of them must certainly be variable. The magnitude of π^2 is given in the S.M.P. as 5·81, that of π^1 not having been measured, and the addition of a companion of the same brightness would increase the brightness to 5·06, which agrees very closely with the observed magnitude on Oct. 31. It is evidently π^1, therefore, which is the variable star. Lacaille made the magnitudes of π^1 and π^2 7 and 6 respectively, but in the Brisbane Catalogue they are both given as 6. Gould remarks that "the color of π^1 Gruis is a deep crimson, while its neighbor π^2 is conspicuously white."

1026. The following are the observations of L. 9181 and L. 9183:—

	L. 9181.	L. 9183.
	M.	M.
Oct. 30	5·25	5·25
,, 31	5·2	5·2

The two accordant observations of L. 9181 differ so largely from the S.M.P. value that the star would appear to be variable, though this is rendered less likely from the fact that the two accordant observations of L. 9183 also differ considerably from the S.M.P. magnitude.

1028. See 1026.

1042. Oct. 15, 3·1 (very low); Oct. 31, 3·6. Suspected var. at Cordoba.

1043. Oct. 30, 5·65; Oct. 31, 5·7.

1044,5. Attention was early directed to the two stars γ and δ Piscis Aust. from the fact of their being marked 5 and 6 mag. respectively in Proctor's Atlas, whereas δ was found actually to be slightly superior to γ.

	γ. M.	δ. M.
Oct. 13	4·15	4·05
„ 14	4·2	4·2
„ 15	4·35	4·1
„ 22	4·6	4·4
„ 23	4·5	4·3
„ 25	4·3	4·1
„ 26	4·3	4·1
„ 28	4·4	4·2
„ 30	4·35	4·25
„ 31	4·55	4·35
Nov. 4	4·3	4·15
„ 23	4·35	4·25
„ 24	4·25	4·25
Dec. 10	4·45	4·4
„ 23	4·35	4·2
„ 29	4·35	4·15

Gould remarks that the Cordoba estimates of γ "fluctuate from 4·5 to 5·0." The H.P. mag. of γ is 4·29, and of δ 4·43, which reverses the order of brightness of the stars as shown by the U.A., S.M.P., and the present Catalogue. Argelander, Heis, B. and H. all make the two stars the same magnitude. The evidence in favour of variation does not seem very strong, though there may be slight fluctuations in relative brightness.

1046. The H.P. mag. is 1·26.

1051. An observation 5·4 on Feb. 28, marked "rough est. owing to cloud," has been rejected.

1055. Feb. 21, 5·55; Feb. 28, 5·35. The S.M.P. measures are discordant.

1056. An observation 5·7 on Feb. 28, marked "rough est. owing to cloud," has been rejected.

1061. The observation was made on Mar. 1.

1062. The observation was made on Oct. 15. Suspected var. at Cordoba.

1065. The observation was made on Oct. 14.

1067,8,9. The observations were made on Mar. 1. Altitude very low.

1070. The observation was made on Nov. 3.

1071,2. The observations of γ^1 and γ^2 Octantis are:—

	γ^1. M.	γ^2. M.
Feb. 21	4·95	5·75
„ 28	4·75	5·15

The S.M.P. measures of both stars are rather discordant, particularly those of γ^2. B. and H. rather strangely make the two stars equally bright.

1073. The observation was made on Mar. 1, alt. low.

1074. Feb. 28, 4·4; Mar. 1, 4·5 (alt. very low on both nights). The S.M.P. measures are very discordant, so that the star is perhaps var. B. made it 5⅓, H. 4·5.

1076. Feb. 28, 3·9; Mar. 1, 3·75 (alt. low on both nights). B. however made the mag. 5 and H. 3·5, so that there is some evidence in favor of variability.

1077. Oct. 15, 5·75; Nov. 3, 5·05; Nov. 11, 5·1.

1080. The H.P. mag. is 4·98.

1081. Feb. 28, 5·1; Mar. 1, 5·0.

1082. Feb. 28, 6·1; Mar. 1, 5·85.

1083. The observation was made on Nov. 11.

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